

Lost in space

Young people, bus networks and rights to the city

Lincoln, RA; Gregory, Adrienne

Licence:
Free to read

[Link to output in Bond University research repository.](#)

Recommended citation(APA):

Lincoln, RA., & Gregory, A. (2015). *Lost in space: Young people, bus networks and rights to the city*. 218. Abstract from The fifth EUGEO Congress on the Geography of Europe, Budapest, Hungary. <https://www.eugeo2015.com/presentations/presentation/695>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

For more information, or if you believe that this document breaches copyright, please contact the Bond University research repository coordinator.



CONGRESS PROGRAMME AND ABSTRACTS



HUNGARIAN
GEOGRAPHICAL
SOCIETY



WWW.EUGEO2015.COM



Understanding our world.



ArcGIS Online **Mix and mash.**

You can add greater depth and meaning to your work by layering on data drawn from maps built and published by other ArcGIS® Online subscribers.

Welcome to the new frontier in geographic information systems.

30-day free trial: esri.com/agol



CONGRESS
PROGRAMME
AND ABSTRACTS



STEERING COMMITTEE

József Benedek, Péter Csorba, Gyula Gábris, Róbert Győri, Erzsébet Horváth, Dávid Karátson, Ádám Kertész, Éva Kiss, Károly Kocsis, Zoltán Kovács, Gábor Kozma, Dénes Lóczy, Gábor Mezősi, Gábor Michalkó, Norbert Pap, Zoltán Szalai, Judit Timár, András Trócsányi, Márton Veress, László Zentai

CONGRESS SECRETARIAT

Ágnes Erőss, Zsolt Heiling, József Kovács, László Mari, Andrea Mohai, András Sik, Krisztián Zimay

EVENT MANAGEMENT: Heiling Média Ltd.



ASSOCIATION OF GEOGRAPHICAL SOCIETIES IN EUROPE

Website: www.eugeo.eu

E-mail: info@eugeo.eu

President: Henk Ottens

EC Members: Zoltán Kovács, Christian Vandermotten

Secretary-General: Massimiliano Tabusi



HUNGARIAN
GEOGRAPHICAL
SOCIETY

HUNGARIAN GEOGRAPHICAL SOCIETY

Address: 1112 Budapest, Budaörsi út 43-45.

Website: www.foldrajzitasasag.hu

E-mail: info@foldrajzitasasag.hu

President: Gyula Gábris

Vice President: Zoltán Kovács, Gábor Michalkó

Secretary-General: László Mari

Secretary: Ágnes Erőss

Director: Zsolt Heiling

ISBN 978-615-80307-0-0

Published by the Hungarian Geographical Society

Copyright © Hungarian Geographical Society

Prepress: Heiling Média Ltd.

Printed in Pethő Nyomda Ltd.



Dear EUGEO 2015 delegates,

On behalf of the Executive Committee of the European Association of Geographical Societies, a very warm welcome for all of you to the EUGEO 2015 congress! I hope, in fact I am quite sure, that your participation in this event will be both useful and enjoyable. The biennial EUGEO congresses have attained a solid position among the major Geography events in Europe. After its successful predecessors in Amsterdam (2007), Bratislava (2009), London (2011), and Rome (2013), this fifth version of a scientific gathering of the Geographical Societies and Associations in Europe again promises to become a congress to be remembered. Budapest appears to be another of those attractive European capital cities worth visiting for a major meeting. EUGEO congresses are, in the meantime by tradition, affordable and friendly to young, early career geographers.

EUGEO 2015 takes place in a period of tension, uncertainty and warfare, both within and at the borders of Europe. Political Geography, in particular European geopolitics and financial geographies, rightly have been given a prominent place among the themes to be presented and discussed in the Hungarian capital.

Space-time dynamics are at the heart of geographical inquiry, and geographers should continue to give priority to closely monitor and interpret these dynamics. Many sessions are devoted to this theme. Vulnerability of and hazards in the natural environment, often related to climate change and sustainability of resources, are more medium to long-term issues central to physical and environmental geographical researchers and practitioners.

Finally, Geoinformation Science, probably to the surprise of quite some geographers, continues to be a thriving interdisciplinary field and business opportunity that needs substantial geographic input and the new data and methods that are developed should be exploited in geographical research and applications.

The Budapest Congress is made possible by EUGEO member the Hungarian Geographical Society, together with the Hungarian Academy of Sciences and the Eötvös Loránd University. We also thank the main sponsors: the Pallas Athena Geopolitical Foundation PAGEO, Esri GIS Mapping Software and the City of Budapest, for their generous support. Many people worked and are working hard to make EUGEO possible and successful: the Steering Committee, the Congress Secretariat and all others that you will see working for the congress in Budapest. Have a great congress and time along the Blue Danube!

Henk Ottens,
EUGEO President



Dear Geographers, honoured guests,

It is a great pleasure for me to welcome you to the 5th EUGEO Congress in Budapest on behalf of the Hungarian geographical community. EUGEO, as a network and forum for the geographical societies in Europe launched its biennial congresses in Amsterdam in 2007. After Bratislava (2009), London (2011) and Rome (2013) this is the fifth EUGEO congress in the series, with over six hundred delegates from 45 countries. The number of participants and the diversity of sessions have greatly increased since 2007 reflecting the growing demand of geographers for this Pan-European academic meeting and the success of the original idea.

As the final programme demonstrates, geographers seek to find answers to a growing number of problems affecting humankind. The motto of the present congress „Convergences and Divergences of Geography in Europe” reflects the way in which our discipline has developed in the recent past. The mushrooming of new research topics, the far-reaching specialisations and not least the strengthening cooperation between geographers and representatives of other disciplines all loosened up the traditional boundaries of geography. Is divergence pervasive within our discipline or does it go hand in hand with certain tendencies of convergence among various sub-disciplines, countries and schools? I sincerely hope this congress will shed light on some of these questions.

The only major international geographical conference to be held in Hungary was the IGU regional conference in 1971. Since then the Iron Curtain was lifted, old boundaries were dismantled in Europe, and a new generation of geographers has grown up. These young scholars are prominent amongst the participants at this conference, thanks to the endeavour of EUGEO founding fathers to make the biennial congresses easily accessible for young geographers. I think this could be a good starting point for the success of this congress, in addition to the carefully constructed paper and poster sessions, stimulating keynote lectures, field excursions and social events during the three days ahead. On behalf of the local Organising Committee and all those who have contributed to the organisation of this congress I warmly welcome you to Hungary and to Budapest! As we say in Hungary: Isten hozta!

Zoltán Kovács
Vice-President, Hungarian Geographical Society
Chair of the Organising Committee

TABLE OF CONTENTS

TABLE OF CONTENTS	4
PROGRAMME OVERVIEW	6
HUNGARIAN GEOGRAPHICAL SOCIETY	8
VENUES	10
EÖTVÖS LORÁND UNIVERSITY (ELTE) – MAIN VENUE	10
THE HUNGARIAN ACADEMY OF SCIENCES (MTA)	12
GERBEAUD HOUSE	13
MAPS	14
MAIN CONGRESS VENUE, BUILDING MAPS	16
PROGRAMME	18
MONDAY – 31 august 2015	19
TUESDAY – 1 September 2015	21
WEDNESDAY – 2 September 2015	23
CITY TOURS	24
SERVICES	25
TRANSPORTATION	26
FAQ ABOUT HUNGARY	27
KEYNOTE LECTURES	28
Plenary 01	28
Plenary 02	29
Plenary 03	30
PAPER SESSIONS	31
THEMATIC PANELS	68
POSTER SESSION	71
ABSTRACTS – PAPER SESSIONS	73
P01 A cohesive Europe in 2020 – new instruments, new concepts, new territories	73
P03 Applied urban climate and bioclimate	76
P04 Art, spatial experimentation and knowledge production	80
P05 Benefits of remote sensing for geography	81
P07 Challenging borders: a critical perspective on the relation between state, territory, citizenship and identity	83
P08 Changing world, changing human mobilities: global convergence and divergence	89
P09 Climate change adaptation and disaster risk reduction integration: a multi-disciplinary and multi-scalar perspective	99
P10 Complex systems, cognition and territorial planning	102
P11 Demographic change – conceptual debate and regional implications	104
P12 Deperipheralisation: adaptation, strategies and potentials of peripheralised regions in CEE	106
P13 Emerging economic spaces, industries and trends	109
P14 Environmental geography	112
P16 Geographical education	116
P17 Geographies of nature – understanding, sense making, knowledge making	121
P18 Geography and sport	123
P19 Geography, empires, nations and the role of geographical societies	125
P20 Geography of higher education and the production of knowledge	128
P21 Geography in economic and territorial development policies	130
P22 GIS-based geomorphological mapping	133
P24 Human-environment researches in unified (?) geography, theory and practice	136
P25 Identity, ethnicity and sustainable development in Post-Soviet Space	138
P30 Landslide hazard	141

P31 “Mezzogiorni” of Europe – Old and new growth gaps of European less developed regions in the years of economic crisis	143
P32 Multilingualism, ethnicity, territory and power	146
P33 New and emerging electoral geographies: methods, patterns, movements	150
P34 New economic spaces in rural areas	152
P35 No man’s land or dependent peripheries: understanding economic restructuring through local practices within and outside global production networks	155
P36 Occupy! – Power, resistance and commemoration in public space	156
P37 People, place, politics – challenges for Central Europe and the Balkans	159
P38 Periglacial processes in high mountain environments	162
P39 Quality of life: discussing the recent geographical approaches and research	164
P40 Regional climate change in Europe	167
P42 River and floodplain rehabilitation	170
P43 Social difference and the transformation of peripheralities in time of crisis	172
P44 Soil erosion and soil conservation in the XXI. century	176
P45 Terrestrial climate archives in Eurasia	178
P46 Territorial development in Europe: innovation and local governance in rural development programmes	180
P47 Territorial imbalances, geopolitical transformations and macroeconomic enlargement processes in the changing scenario of EU	184
P48 The changing geographies of the European city competition under the contemporary globalization	186
P49 The future of cities between competitiveness and vulnerability: the smart city perspective	188
P50 The (ir)relevance of b/ordering: border (re)enforcement and border disputes in the European Union	194
P51 The role of place names in geographical education	195
P52 Tourism, globalization and culture	199
P53 Trajectories and Policies – changing neighborhoods in the Central and Eastern European cities	205
P54 Creative and innovative solutions for the development of urban and rural areas	207
P55 Ubiquitous Cartography – the crowdsourced geographic information used in “Giscience”	210
P56 Uneven geographies of education and learning in a changing Europe	212
P58 Urban political economies of Eastern Europe from a global perspective	214
P59 Where people shop: dynamics in metropolitan retail landscapes in Europe	216
P60 Whose right to the city?	218
P61 Princes, nations and territories: maps as expression of power	223
P62 From global networks to local markets – The changing geographies of consumption	225
P64 Ageing and Challenges of Depopulation	227
P65 Local responses to global challenges: managing subnational actors in the age of transformation	228
ABSTRACTS – THEMATIC PANELS	231
T01 Ecritures du rural / Rural writing	231
T03 Geography in action – spatial planning as a way of discourse on borders	234
T06 Sustainability and consumption	236
T07 Teaching for human GeoCapabilities	238
T08 Towards a new International Strategy for Geography Education (ISGE)	238
T09 Maptionnaire – Create Maps for Insight and Engagement	238
ABSTRACTS – POSTER SESSION	239
P63 Poster session	239
INDEX OF NAMES	250
KEYWORDS	258

PROGRAMME OVERVIEW

30 AUGUST 2015, SUNDAY

MAIN CONGRESS VENUE

17:00–21:00 Registration

19:00–21:00 Icebreaker Party

31 AUGUST 2015, MONDAY

HUNGARIAN ACADEMY OF SCIENCES – CEREMONIAL HALL

08:00–09:00 Registration

09:00–10:00 Opening Ceremony

Welcome address from:

Zoltán Kovács, Vice-President, Hungarian Geographical Society, Chair of the Organising Committee
Henk Ottens, EUGEO President, Royal Dutch Geographical Society (KNAG) President

“The Sounds of Hungary” – Featuring the string soloists of *Concerto Budapest*

Greetings from:

Ádám Török, Secretary-General of Hungarian Academy of Sciences

András Kisfaludi, Vice-Rector of Eötvös Loránd University

Alexandra Szalay-Bobrovniczky, Vice Mayor of Budapest

“The Sounds of Hungary” – Featuring the string soloists of *Concerto Budapest*

10:00–11:00 Plenary 01

Keynote lectures:

Jean Poesen, Division of Geography, Department of Earth and Environmental Sciences,
 KU Leuven, Belgium: Soil erosion hazard and mitigation in the Euro-Mediterranean region:
 do we need more research?

Herman van der Wusten, University of Amsterdam, The Netherlands:
 Imagined communities and practiced geopolitics

11:10 Bus transfer to the main Congress venue

MAIN CONGRESS VENUE

11:30–19:00 Registration

12:00–13:00 Lunch

13:00–14:45 Parallel sessions 01

14:45–15:15 Opening Ceremony of Poster session, Location: Main Hall – Coffee break

15:15–17:00 Parallel sessions 02

17:15–19:00 Parallel sessions 03

19:00–19:30 *Norbert Csizmadia*, Pallas Athéné Geopolitical Foundation, Chair of Board: Vision and strategy

19:30–21:00 Social dinner (included in registration fee)

1 SEPTEMBER 2015, TUESDAY

MAIN CONGRESS VENUE

08:00–17:15 Registration

08:30–10:15 Parallel sessions 04

10:15–10:45 Coffee break

10:45–12:30 Parallel sessions 05

12:30–13:30 Lunch

13:30–14:45 Plenary 02

Location: Room A

Keynote lectures:

Eleonore Kofman, Middlesex University, United Kingdom:

Mobilities and Migrations in Europe: a problematic dichotomy

Michael A. Fullen, Faculty of Science and Engineering, The University of Wolverhampton, United Kingdom: Closed loop recycling and Physical Geography

15:00–16:45 Parallel sessions 06

16:45–17:15 Coffee break

17:15–19:00 Parallel sessions 07

18:00–19:30 General Assembly

GERBEAUD HOUSE

20:15–23:00 Gala dinner

2 SEPTEMBER 2015, WEDNESDAY

MAIN CONGRESS VENUE

08:00–13:30 Registration

08:30–10:15 Parallel sessions 08

10:15–10:45 Coffee break

10:45–12:30 Parallel sessions 09

12:30–13:30 Lunch

13:30–14:45 Plenary 03

Location: Room A

Keynote lectures:

Peter Meusbürger, Department of Geography, Heidelberg University, Germany:

Knowledge environments. Some methodological considerations

Judit Timár, Centre for Economic and Regional Studies, HAS, Hungary:

Convergences and divergences of geographies from an East-Central European perspective

15:00–16:45 Parallel sessions 10

17:00–18:00 Closing Ceremony

Location: Room A

Chair: *Henk Ottens*, EUGEO President, Royal Dutch Geographical Society (KNAG) President

HUNGARIAN GEOGRAPHICAL SOCIETY



HUNGARIAN GEOGRAPHICAL SOCIETY

The Hungarian Geographical Society was founded in 1872, like many similar societies around Europe at the time, to promote the science of geography. Membership and interest grew, mainly due to the work of Lajos Lóczy, an oriental geographer who is credited with the establishment of modern geography in Hungary. The *Földrajzi Közlemények*, the scientific journal of the Society, was first published in 1873. From 1880 the 'Magyar Földrajzi Társaság Könyvtára' book series had been published, all 67 volumes became very popular due to its exclusive appearance and high-quality scientific content.

Before WWII members of the Hungarian Geographical Society were accomplished researchers, some of them influential in politics as well, for instance count Pál Teleki, who became prime minister between 1920-21 and 1939-41. This contributed to the abolishment of the Society between 1949-1952. Following 1952, the Society gradually became more open towards geography education and the membership mainly consisted of elementary and high school teachers. Following 1990, under new circumstances and facing challenges of the 21st century, the Society makes effort to recover its popularity and reinstall its scientific reputation.

Since the beginning the main purpose of the Hungarian Geographical Society is to 'arouse interest in geography by disseminating geographical knowledge, furthermore to foster research especially about the geography of Hungary'. Besides, the Society serves as a forum for geography teachers active in all levels of educational system.

The Society fosters good relationship with nonprofit associations operating in the field of geosciences, universities, schools and research institutes in Hungary. 17 territorial and 9 specialty units organize scientific-dissemination lectures, study tours, exhibitions, educational competitions and family programmes. Furthermore, two journals and the website are help to accomplish the goal of dissemination.

Activities of the Society cover co-organizing scientific conferences (e.g. <http://eugeo2015.com/>), and dissemination lectures all around the country, while the annual meeting offers guided study visits inland and beyond borders. The society is committed to assist talented pupils and university students interested in geography offering them grants and co-organizing educational competitions nationwide. Journals published by the Society target both scientific community and the public

The Society operates a library, which owns the most significant geographical collection in Hungary.

Website: www.foldrajzitasasag.hu



FÖLDRAJZI KÖZLEMÉNYEK GEOGRAPHICAL REVIEW

Földrajzi Közlemények is the scientific journal of the Hungarian Geographical Society. The first issue appeared on 1 March 1873. It is a peer-reviewed periodical published in Hungarian on a quarterly basis. The journal provides an interdisciplinary platform for the exchange of ideas, information and scientific results in geography in Hungary. Volumes of *Földrajzi Közlemények* are available both in online access and in printed version. All articles and reviews are free to access immediately after the date of publication. The journal is registered by the EBSCO indexing service.

**For further information please visit
our website (in Hungarian):**

www.foldrajzitasasag.hu/
[/kiadvanyok/foldrajzi-kozlemenyek](http://kiadvanyok/foldrajzi-kozlemenyek)

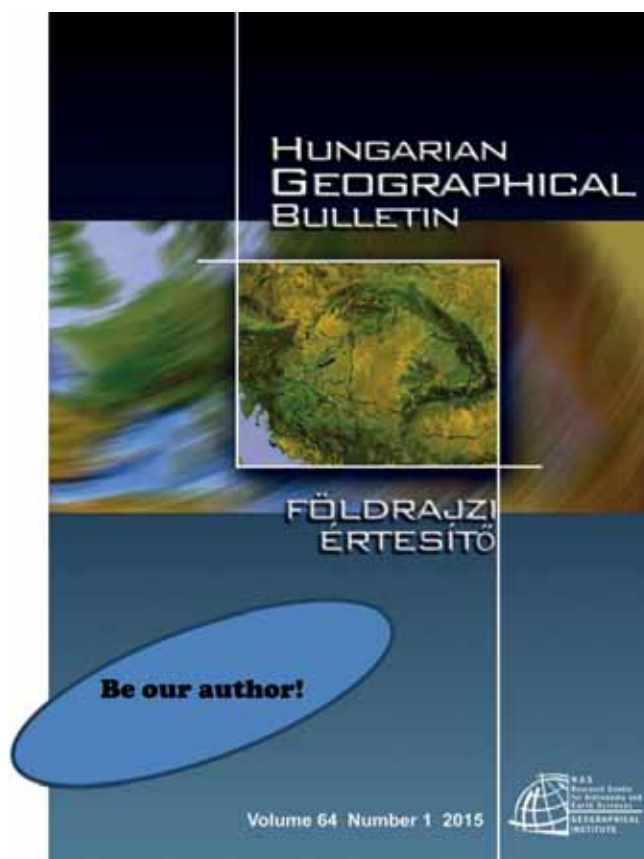


A FÖLDGÖMB THE GLOBE

*Motto: Travel the world with your mind open
(Armin Vámbéry, orientalist, 19th century)*

The magazine belongs to the Hungarian Geographical Society and was founded in 1929. This is the most frequently read Hungarian made monthly popular science magazine with 100 pages each issue. Földgömb publishes analytic articles from the entire world of geography: while equally analysing social processes and phenomena of physical geography, it also investigates in the fields of astronomy and biogeography. 99% of its authors are Hungarian professionals, its photographers are the most outstanding photojournalists, action, socio and nature photographers in Hungary. Földgömb is more than a magazine: apart from its weekly radio broadcast on Gazdasági Rádió (Economy Radio) the Földgömb team is also organizing geography contests for secondary school learners, they are launching research expeditions and organize the annual Explorers' Day – the Festival for Research Expeditions.

Website: www.afoldgomb.hu



HUNGARIAN GEOGRAPHICAL BULLETIN

Hungarian Geographical Bulletin is the leading academic journal in geography in Hungary. It is a double-blind peer-reviewed periodical published in English on a quarterly basis. The journal provides an international and interdisciplinary platform for the exchange of ideas, information and scientific results in geography in Central Europe and beyond. Volumes of Hungarian Geographical Bulletin are available both in online access with DOI and in printed colour version. All articles and reviews are free to access immediately after the date of publication. The journal is registered by the most important and well-known indexing services including SCOPUS.

**For further information
please visit our website:**

www.mtafki.hu/konyvtar/geobull_en.html

VENUES

EÖTVÖS LORÁND UNIVERSITY (ELTE) – MAIN VENUE

BRIEF HISTORY

A modern university with 380 year old traditions

- 2014 Member of Central European Network for Teaching and Research in Academic Liaison (CENTRAL)
- 2013 Member of Agence Universitaire de la Francophonie (AUF)
- 2012 Quality Award for International Cooperation
- 2010 ELTE was awarded the title "research university"
- 2006 Member of the European University Association (EUA)
ELTE was awarded the Erasmus E-Quality Label
- 2003 The Faculty of Informatics, the Faculty of Education and Psychology and the Faculty of Social Sciences were founded
Member of CEI Univer
- 2000 The Faculty of Primary and Pre-School Education and the Bárczi Gusztáv Faculty of Special Education became part of the University Member of Utrecht Network
- 1994 János Harsányi, ELTE alumnus was awarded the Nobel Memorial Prize in Economic Sciences
- 1991 Member of Coimbra Group
- 1990 Member of UNICA Network
- 1983 Member of Danube Rectors' Conference
- 1961 György Békésy, ELTE alumnus was awarded the Nobel Prize in Physiology and Medicine
- 1951 The Medical Faculty (today: Semmelweis University) became an independent higher education institution

- 1950 The University adopted the name of the world-renowned physicist Loránd Eötvös
The Faculty of Theology became an independent higher education institution
- 1949 The Faculty of Science became independent of the Faculty of Humanities
- 1943 György Hevesy, ELTE alumnus was awarded the Nobel Prize for Chemistry
- 1937 Albert Szent-Györgyi, ELTE alumnus was awarded the Nobel Prize in Physiology and Medicine
- 1905 Fülöp Lénárd, ELTE alumnus was awarded the Nobel Prize for Physics
- 1900 Launch of the first Special Education Teacher Training Course of the world, predecessor of the Bárczi Gusztáv Faculty of Special Education
- 1896 Vilma Glücklich, the first female student was admitted to the University
- 1872 Europe's first Teacher Training School, known today as ELTE Trefort Ágoston Teacher Training School, was founded
- 1869 The "State Teacher Training Institution" known today as the Faculty of Primary and Pre-School Education, was founded
- 1860 Authorization of Hungarian as a language of education at the University
- 1784 German starts to supplant Latin as the main language of education
The University moved from Buda to Pest
- 1777 The University moved to Buda
- 1769 The Medical Faculty was launched
- 1667 The Faculty of Law was founded
- 1635 Cardinal Péter Pázmány signs the founding documents of the University in Nagyszombat (today: Trnava, Slovakia). The first two faculties of the university were the Faculty of Humanities and the Faculty of Theology.

ADDRESS

**Eötvös Loránd University
Lágymányosi Campus,
Southern Block,
1117 Budapest,
Pázmány Péter promenade 1/C.**

How to access the venue See page 26.





The predecessor of Eötvös Loránd University (ELTE) was founded in the rural town of Nagyszombat (today: Trnava, Slovakia) in 1635 by Cardinal Péter Pázmány, as a catholic university for teaching Theology and Philosophy. In 1770-1780, the University was transferred to Buda and later to Pest, and with the support of Maria Theresa, the Empress of Austria and Queen of Hungary, became the Royal Hungarian University.

Over the following decades, new faculties were established to meet the expectations of a learned society. In the second half of the 19th century, the University developed into a centre of modern higher education in today's sense, covering nearly every scholarly field.

In 1950 the university was reorganized and adopted its present name. It was named after one of its professors, the world-famous physicist, Loránd Eötvös.

Recently, a new campus has been built on the scenic banks of the Danube. This campus, Lágymányos Campus is now home to three faculties: Faculty of Informatics, Faculty of Science, and Faculty of Social Sciences.

Currently, the university has eight faculties: Education and Psychology, Humanities, Informatics, Law, Primary and Pre-School Education, Science, Social Sciences, and the Bárczi Gusztáv Faculty of Special Education.

Eötvös Loránd University is internationally recognized and its programs are accredited by the Hungarian Accreditation Board. The diplomas issued by Eötvös Loránd University are acknowledged worldwide, and its course credits are transferable in all countries in the European Union.

Over the last hundred years, Eötvös Loránd University (ELTE) has had many world famous scientists and four Nobel Prize laureates among its teachers and alumni. The current number of students enrolled yearly has reached 28,000, and there is an academic staff of 1,800 highly-qualified teachers and researchers.

Eötvös Loránd University has extensive international relations with higher education institutions and international organisations all over the world and continues to develop and maintain these relations for the benefit of both Hungarian and foreign students and staff.

The university offers several summer university programmes to the international community.

Student and staff mobility are supported by mobility programs, such as CEEPUS, DAAD and a number of Lifelong Learning Programmes, including Leonardo, Grundtvig, and Erasmus programs.

The university has formal bilateral agreements for co-operation and exchange at an institutional or a faculty level with 400 universities in Europe, Asia, Africa, North and South America. The main areas of cooperation are joint training and research projects, joint participation in international conferences and workshops, and the exchange of students, guest professors, and administrative staff.

ELTE is an active member of a number of university networks with high prestige.

ELTE is the most active higher education institution in Hungary with respect to mobility programs, institutional bilateral cooperations, and university networks.

THE HUNGARIAN ACADEMY OF SCIENCES (MTA)

MISSION STATEMENT

The Hungarian Academy of Sciences (MTA) is committed to the advancement, shaping, and service of science. With the criteria of excellence in the forefront, the main responsibilities of the Academy, the prime representative of Hungarian science, are to support and represent various scientific fields, and to distribute scientific results. MTA contributes not only to the organisation of scientific research in Hungary, but also aims to bring Hungarian and international research closer. The Academy supports the scientific activities of promising young researchers, defends science ethics in public life, and guards over the honour and values of scientific endeavours.

A BRIEF HISTORY

The need for establishing a scholarly society was first mentioned in Act VIII of 1808. During the last decade of the 18th and the first decade of the 19th century, various plans were conceived for the establishment of an academy for developing and propagating the Hungarian language and for promoting the development of science, but funds for establishing such a society were not available. This question was often raised until, at the November 3, 1825, district session of the Diet in Bratislava (the seat of the Hungarian Parliament), the county delegates started a debate on the matter of a Hungarian Learned Society, criticizing the magnates for not making sacrifices for a national cause. It was there that Count István Széchenyi offered one year's income of his estate for the purposes of bringing about a learned society.

CHIEF OFFICERS

László Lovász is the current President of the MTA. Lovász is a mathematician, best known for his work in combinatorics, for which he was awarded the Wolf Prize and the Knuth Prize in 1999, and the Kyoto Prize in 2010. The Secretary-General of MTA is economist Ádám Török, the Deputy Secretary-General is biologist Beáta Barnabás, the Vice-President for Natural Sciences is mathematician Domokos Szász, the Vice-President for Life-Sciences is neurobiologist Tamás Freund, and the Vice-President for Social Sciences is legal scholar Lajos Vékás.

MTA'S STRUCTURE

With its tri-annually elected members (Full Members, Corresponding Members, External and Honorary Members) representing all scientific sections of MTA and thereby a wide range of sciences and fields of scholarship, MTA's Doctoral Council adjudicates requests for the Doctor of MTA title each month except for July and August. (Members of MTA are then tri-annually recruited from the ranks of Doctors of MTA.)

MTA's Doctoral Council also brings to conclusion Ph.D. applications that had been handed in to its predecessor institution, the now defunct Scientific Qualification Committee.

To promote outstanding research, MTA's Doctoral Council has also been adjudicating requests handed in by under-45 post-doctoral scholars and scientists towards monthly Bolyai-grants lasting 1, 2, or 3 years. Over the last six years, out of 3 433 such requests 1 411 have been granted.

ADDRESS

**Hungarian Academy of Sciences
(Magyar Tudományos Akadémia)
1051 Budapest, Széchenyi István square 9.**

How to access the venue See page 26.



THE GENERAL ASSEMBLY

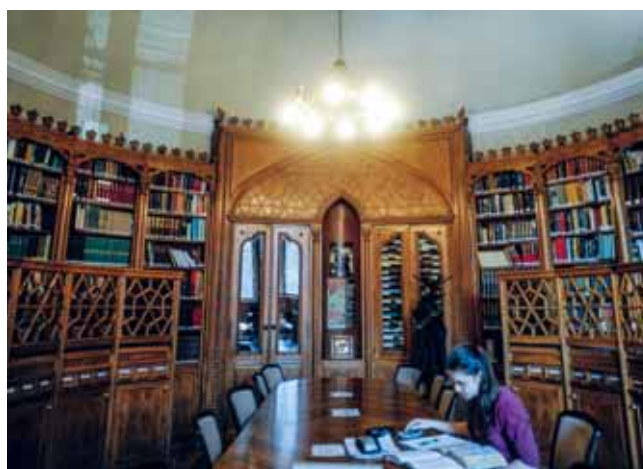
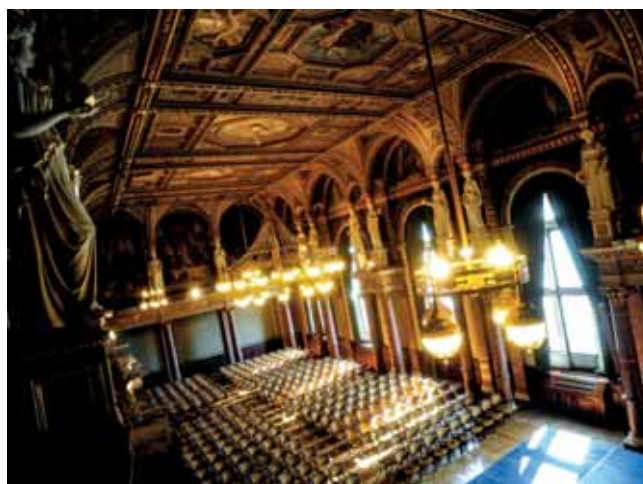
The General Assembly is the supreme body of the Academy as an independent public-law association, constituted by ordinary and corresponding members, and 200 representatives of non-academician members, all of whom are elected by secret ballot for a three year term.

MTA'S RESEARCH NETWORK

MTA establishes and maintains research institutes in the fields of the natural and social sciences. It also operates such other institutions of learning as libraries, archives, systems of information, etc. as well as it subsidises research groups operating at universities and public collections. Currently, there are 47 research institutes (including 10 Research Centres) run by MTA.

MOMENTUM PROGRAM

The objective of the Momentum Program is a dynamic renewal of the research teams of the Academy and participating universities via attracting outstanding young researchers back to Hungary. The impact and success of this application model is highly acclaimed and recognised even by the international scientific community. Initiated by former MTA President József Pálkás, the Momentum program aims to halt the emigration of young researchers, provides a new supply of talented researchers, extends career possibilities, and increases the competitiveness of MTA's research institutes and participating universities.



GERBEAUD HOUSE

ADDRESS

Gerbeaud House – Atrium
1051 Budapest Vörösmarty square 7-8.

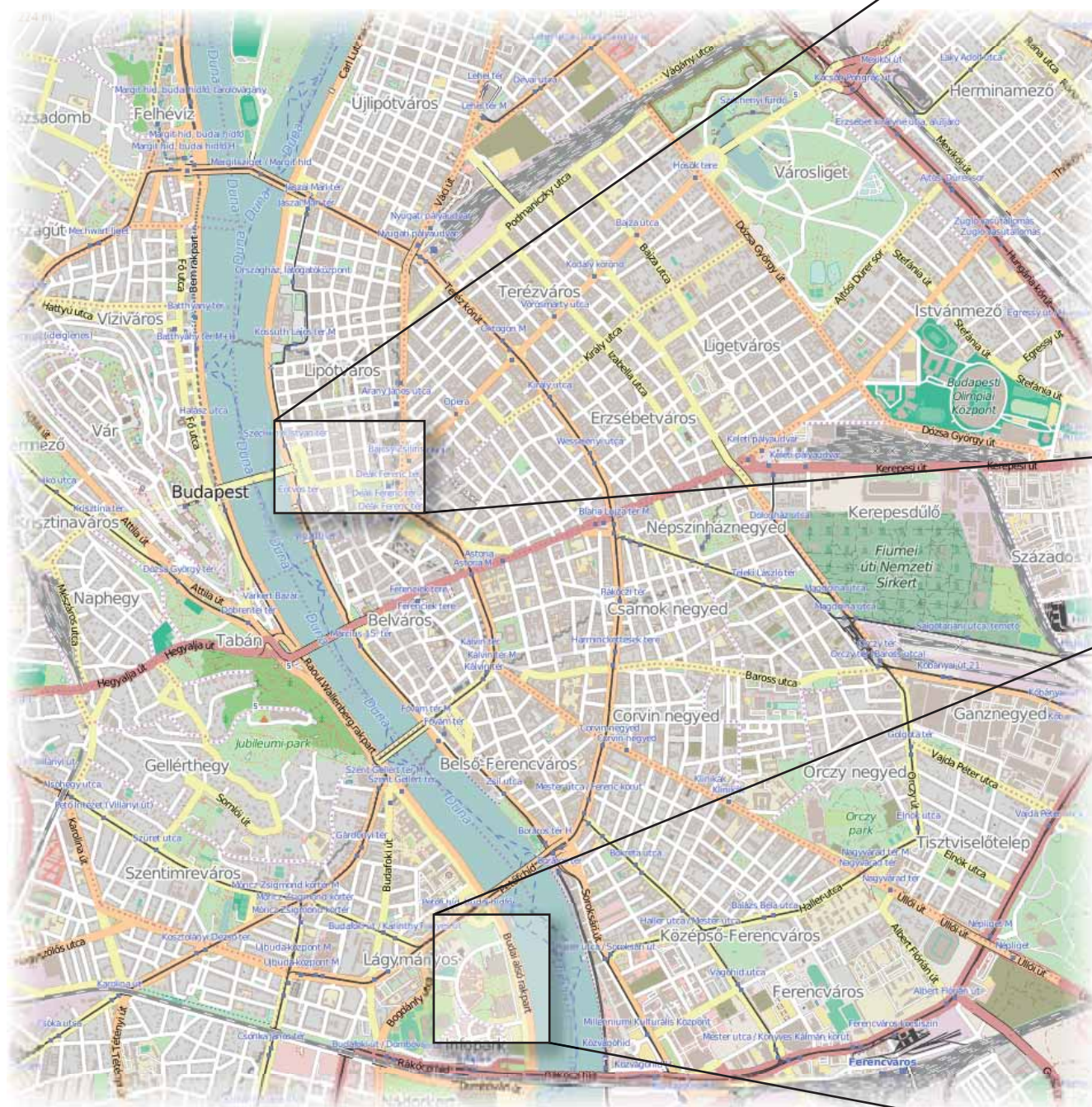
How to access the venue See page 26.



For over a century and a half, Gerbeaud Café has been located in the heart of downtown Budapest. The glass-roofed Atrium in the central courtyard of the building is the most popular events hall. Modern crystal chandeliers and silk curtains make the interior all the more extraordinary. The Gerbeaud House provides the widest range of event facilities in Budapest. With Gerbeaud

Gourmet Catering you can enjoy an exceptional culinary experience. An elegant professional staff working together for over 10 years with young and polite servers, and award-winning sommeliers. The guarantee of quality is Michelin star chef Szabina Szulló's well-established, trained kitchen team of many years, and their use of only the highest quality fresh ingredients.

MAPS



HUNGARIAN ACADEMY
OF SCIENCES (MTA)

GERBEAUD HOUSE

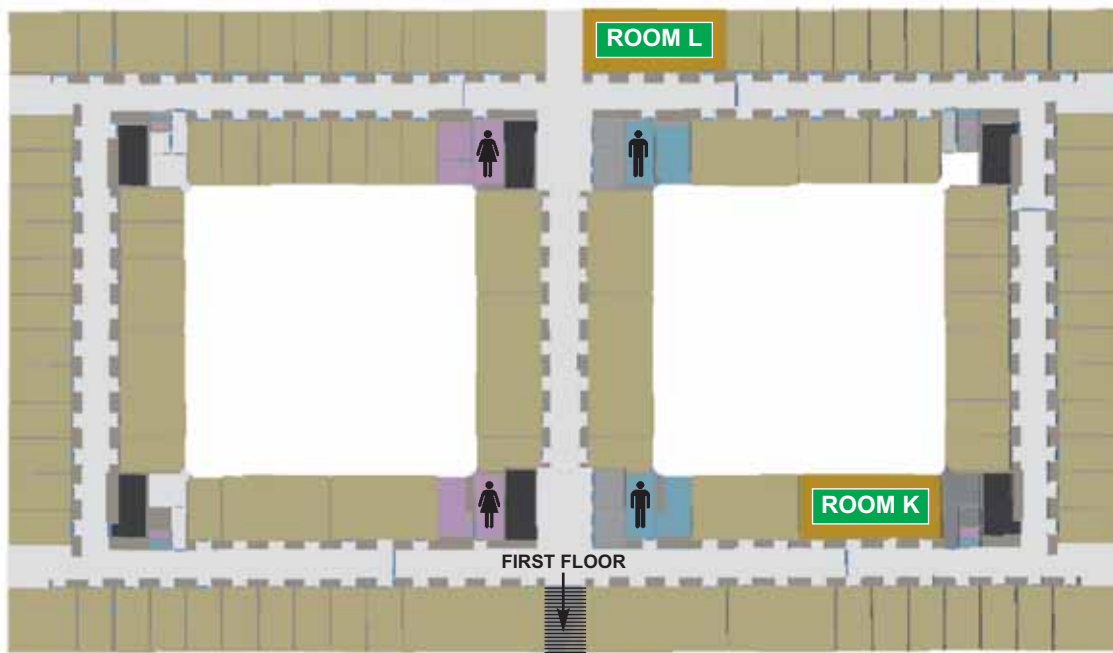


EÖTVÖS LORÁND UNIVERSITY, SOUTHERN BLOCK, MAIN CONGRESS VENUE

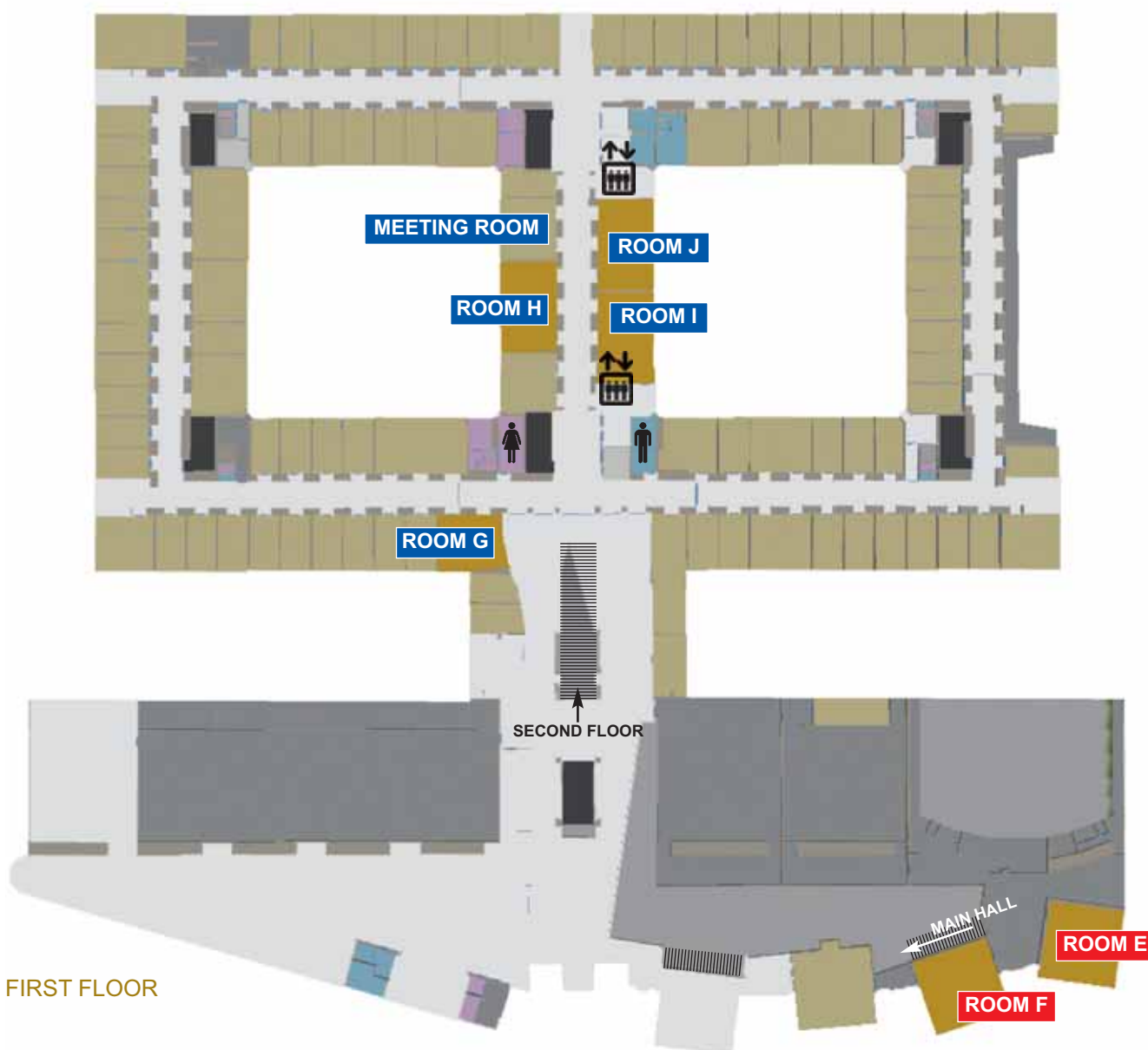


**1117 Budapest,
Pázmány Péter sétány 1/C.**





SECOND FLOOR



FIRST FLOOR

PROGRAMME

LOCATION	8:00–11:00	13:00–14:45	
ROOM B	HUNGARIAN ACADEMY OF SCIENCES CEREMONIAL HALL Opening Ceremony Plenary 01	P52 – Tourism, globalization and culture	
		SLOT1	
ROOM C		P31 – “Mezzogiorni” of Europe – Old and new growth gaps of European less developed regions in the years of economic crisis	
		SLOT1	
ROOM D		P51 – The role of place names in geographical education	
		SLOT1	
ROOM E		P50 – The (ir)relevance of b/ordering: border (re)enforcement and border disputes in the European Union	
		SLOT1	
ROOM F		P60 – Whose right to the city?	
		SLOT1	
ROOM G		P13 – Emerging economic spaces, industries and trends	
		SLOT1	
ROOM H		P55 – Ubiquitous Cartography – the crowdsourced geographic information used in “Giscience”	
		SLOT1	
ROOM I		P09 – Climate change adaptation and disaster risk reduction integration: a multi-disciplinary and multi-scalar perspective	
		SLOT1	
ROOM J		P14 – Environmental geography	
		SLOT1	
ROOM K		P08 – Changing world, changing human mobilities: global convergence and divergence	
		SLOT1	
ROOM L		P58 – Urban political economies of Eastern Europe from a global perspective	
		SLOT1	
ROOM M		T09 – Maptionnaire – Create Maps for Insight and Engagement	
		Workshop	

	15:15–17:00	17:15–19:00	19:00–19:30
	P52 – Tourism, globalization and culture		ROOM A
	SLOT2	SLOT3	
	P31 – “Mezzogiorni” of Europe – Old and new growth gaps of European less developed regions in the years of economic crisis	T07 – Teaching for human GeoCapabilities	
	SLOT2	Workshop	
	P51 – The role of place names in geographical education	P61 – Princes, nations and territories: maps as expression of power	
	SLOT2	SLOT1	
	P37 – People, place, politics – challenges for Central Europe and the Balkans		
	SLOT1	SLOT2	
	P60 – Whose right to the city?		
	SLOT2	SLOT3	
	P13 – Emerging economic spaces, industries and trends	P54 – Creative and innovative solutions for the development of urban and rural areas	
	SLOT2	SLOT1	
	P55 – Ubiquitous Cartography – the crowdsourced geographic information used in “GIsience”	P17 – Geographies of nature – understanding, sense making, knowledge making	
	SLOT2	SLOT1	
	P09 – Climate change adaptation and disaster risk reduction integration: a multi-disciplinary and multi-scalar perspective	P05 – Benefits of remote sensing for geography	
	SLOT2	SLOT1	
	P14 – Environmental geography		
	SLOT2	SLOT3	
	P08 – Changing world, changing human mobilities: global convergence and divergence		
	SLOT2	SLOT3	
	P58 – Urban political economies of Eastern Europe from a global perspective	P49 – The future of cities between competitiveness and vulnerability: the smart city perspective	
	SLOT2	SLOT1	
	P65 – Local responses to global challenges: managing subnational actors in the age of transformation		
	SLOT1	SLOT2	

PROGRAMME

LOCATION	8:30–10.15	10:45–12:30
ROOM B	P39 – Quality of life: discussing the recent geographical approaches and research	
	SLOT1	SLOT2
ROOM C	P34 – New economic spaces in rural areas	
	SLOT1	SLOT2
ROOM D	P20 – Geography of higher education and the production of knowledge	
	SLOT1	SLOT2
ROOM E	P07 – Challenging borders: a critical perspective on the relation between state, territory, citizenship and identity	
	SLOT1	SLOT2
ROOM F	P60 – Whose right to the city?	P36 – Occupy! – Power, resistance and commemoration in public space
	SLOT4	SLOT1
ROOM G	P54 – Creative and innovative solutions for the development of urban and rural areas	P25 – Identity, ethnicity and sustainable development in Post-Soviet Space
	SLOT2	SLOT1
ROOM H	P22 – GIS-based geomorphological mapping	
	SLOT1	SLOT2
ROOM I	P03 – Applied urban climate and bioclimate	
	SLOT1	SLOT2
ROOM J	P44 – Soil erosion and soil conservation in the XXI. century	
	SLOT1	SLOT2
ROOM K	P08 – Changing world, changing human mobilities: global convergence and divergence	
	SLOT4	SLOT5
ROOM L	P49 – The future of cities between competitiveness and vulnerability: the smart city perspective	
	SLOT2	SLOT3
ROOM M	T06 – Sustainability and consumption	
	SLOT1	SLOT2

TUESDAY – 1 SEPTEMBER 2015

	13:30–14:45	15:00–16:45	17:15–19:00
ROOM A Plenary 02		P11 – Demographic change – conceptual debate and regional implications	P64 – Ageing and Challenges of Depopulation
		SLOT1	SLOT1
		P12 – Deperipheralisation: adaptation, strategies and potentials of peripheralised regions in CEE	
		SLOT1	SLOT2
		P10 – Complex systems, cognition and territorial planning	
		SLOT1	SLOT2
		P07 – Challenging borders: a critical perspective on the relation between state, territory, citizenship and identity	
		SLOT3	SLOT4
		P36 – Occupy! – Power, resistance and commemoration in public space	P19 – Geography, empires, nations and the role of geographical societies
		SLOT2	SLOT1
		P25 – Identity, ethnicity and sustainable development in Post-Soviet Space	P46 – Territorial development in Europe: innovation and local governance in rural development programmes
		SLOT2	SLOT1
		T01 – Ecritures du rural / Rural writing	
		SLOT1	SLOT2
		P45 – Terrestrial climate archives in Eurasia	
		SLOT1	SLOT2
		P42 – River and floodplain rehabilitation	
		SLOT1	SLOT2
		P08 – Changing world, changing human mobilities: global convergence and divergence	P35 – No man's land or dependent peripheries: understanding economic restructuring through local practices within and outside global production networks
		SLOT6	SLOT1
		P49 – The future of cities between competitiveness and vulnerability: the smart city perspective	P48 – The changing geographies of the European city competition under the contemporary globalization
		SLOT4	SLOT1
		T08 – Towards a new International Strategy for Geography Education (ISGE)	General Assembly (18:00–19:30)
		Workshop	

PROGRAMME

LOCATION	8:30–10:15	10:45–12:30	
ROOM B	P24 – Human-environment researches in unified (?) geography, theory and practice		
	SLOT1	SLOT2	
ROOM C	P43 – Social difference and the transformation of peripheralities in time of crisis		
	SLOT1	SLOT2	
ROOM D	P21 – Geography in economic and territorial development policies		
	SLOT1	SLOT2	
ROOM E	P01 – A cohesive Europe in 2020 – new instruments, new concepts, new territories		
	SLOT1	SLOT2	
ROOM F	P19 – Geography, empires, nations and the role of geographical societies	P32 – Multilingualism, ethnicity, territory and power	
	SLOT2	SLOT1	
ROOM G	P46 – Territorial development in Europe: innovation and local governance in rural development programmes	P33 – New and emerging electoral geographies: methods, patterns, movements	
	SLOT2	SLOT1	
ROOM H	P04 – Art, spatial experimentation and knowledge production	P59 – Where people shop: dynamics in metropolitan retail landscapes in Europe	
	SLOT1	SLOT1	
ROOM I	P40 – Regional climate change in Europe		
	SLOT1	SLOT2	
ROOM J	P30 – Landslide hazard		
	SLOT1	SLOT2	
ROOM K	P16 – Geographical education		
	SLOT1	SLOT2	
ROOM L		P53 – Trajectories and Policies – changing neighborhoods in the Central and Eastern European cities	
		SLOT1	
ROOM M			

WEDNESDAY – 2 SEPTEMBER 2015

13:30–14:45	15:00–16:45	17:00–18:00
ROOM A Plenary 03	P18 – Geography and sport	ROOM A Closing Ceremony
	SLOT1	
	T03 – Geography in action – spatial planning as a way of discourse on borders	
	SLOT1	
	P47 – Territorial imbalances, geopolitical transformations and macroeconomic enlargement processes in the changing scenario of EU	
	SLOT1	
	P32 – Multilingualism, ethnicity, territory and power	
	SLOT2	
	P33 – New and emerging electoral geographies: methods, patterns, movements	
	SLOT2	
	P56 – Uneven geographies of education and learning in a changing Europe	
	SLOT1	
	P62 – From global networks to local markets – The changing geographies of consumption	
	SLOT1	
	P38 – Periglacial processes in high mountain environments	
	SLOT1	
	P16 – Geographical education	
	SLOT3	
	P53 – Trajectories and Policies – changing neighborhoods in the Central and Eastern European cities	
	SLOT2	

CITY TOURS

FIELD TRIP II.

CLASSIC BUDAPEST SIGHTSEEING TOUR

Schedule: Monday – 31 August 2015. 13:00–16:00
Price: 15 € (including public transport fees and guidance)
Application: on our website (click on apply button) and at the registration desk
Payment: at the registration desk in cash
Limit: 50 persons

This classic Budapest sightseeing tour covers the most important tourist attractions of the Hungarian capital (both from the Buda side and the Pest side), supplemented with a concise historical overview of the development of the city.



FIELD TRIP IV.

DIFFERENT APPROACHES OF URBAN REGENERATION IN BUDAPEST

Schedule: Wednesday – 2 September 2015. 13:00–16:00
Price: 15 € (including public transport fees and guidance)
Application: on our website (click on apply button) and on arrival, at the registration desk
Payment: at the registration desk in cash
Limit: 50 persons

On the example of the Corvin Promenade Project and the rehabilitation of Magdolna Quarter in District VIII, this field trip provides a critical narrative of different approaches and practices of urban regeneration in Budapest. Whereas the first (market-generated) project is a radical intervention in the urban tissue of a formerly blighted area (merely displacing urban poverty), the latter is an attempt to move towards a more socially sensitive form of urban rehabilitation – yet, with several question marks.

FIELD TRIP III.

WATERFRONT DEVELOPMENT AND THE FUNCTIONAL TRANSFORMATION OF FORMER INDUSTRIAL AREAS

Schedule: Tuesday – 1 September 2015. 13:00–16:00
Price: 15 € (including public transport fees and guidance)
Application: on our website (click on apply button) and on arrival, at the registration desk
Payment: at the registration desk in cash
Limit: 50 persons

This field trip covers the rapid transformation of the Danube waterfront in District IX (and partly District XI), a formerly monofunctional industrial zone. Through the example of this area, several contemporary urban development processes will be featured, including the post-Fordist restructuring, brownfield regeneration, Keno capitalism, or the postmodern functional fragmentation of urban space.

FIELD TRIP VI.

CITY OF SPAS AND CAVES

Schedule: Tuesday – 1 September 2015. 13:00–16:00
Price: 15 € (including public transport fees and guidance)
Application: on our website (click on apply button) and on arrival, at the registration desk
Payment: at the registration desk in cash
Limit: 25 persons

The Buda Hills are located in the northeastern part of the Transdanubian Range, partly in Budapest. During our field trip we will visit the Gellért Hill to look out to the Buda Hills and the Pest plain to understand the tectonics and geomorphology of the area. We will visit the Cave Church. There are hot thermal springs deep inside Gellért Hill that supply water for three spas.



SERVICES

Registration, information desk

Registration operates in the following places and times:

Sunday – 30 August, Eötvös Loránd University: 17:00–21:00

Monday – 31 August, Hungarian Academy of Sciences: 8:00–9:00

Monday – 31 August, Eötvös Loránd University: 11:30–19:00

Tuesday – 1 September, Eötvös Loránd University: 8:00–17:15

Wednesday – 2 September, Eötvös Loránd University: 8:00–13:30

At the registration you will receive your badge, which is needed to attend any EUGEO 2015 event and to access any EUGEO 2015 services. Please wear your delegate badge at all times. Delegate not wearing a badge will not be admitted to the building, and not be able to access the services. Please note the badge is not transferable or exchangeable.

Internet connection: a wifi network will operate during the Congress for your convenience.

The name of the network is: **EUGEO**, the password is: **budapest**

Facebook: On the Facebook site of the Congress we will upload photos about the Congress daily. So do not hesitate to share or comment!

Bus transfer on Monday: On the first Congress day the programme starts at the Hungarian Academy of Sciences. A bus transfer is organized at 11:10, which will transport all the delegates from the Hungarian Academy of Sciences to the Main Congress Venue. Because of the usual traffic jam in the city, **please be at the exit of the building until 11:10.**

Meeting room: a meeting room is available for research group's meetings. Please ask at the Registration desk. The service is limited so please request a reservation on time.

Lunch: lunch will be available to registered participants during the three days in the Main Hall. See the schedule! The price is included in the registration fee.

Coffee breaks: coffee breaks will be available to registered participants during the Congress. See the schedule! The price is included in the registration fee.

Social Dinner: A Social Dinner will be offered to registered participants in the Main Hall on Monday at 19:30. The price is included in the registration fee.

Cloakroom: For your convenience a cloakroom will operate near the reception. You can leave your baggage there if necessary, before or after your travel home.

Personal belongings: We strongly encourage you to keep your personal belongings with you. Congress Organizers are not responsible for any personal valuable left unattended.

Privacy policy: Please note that during the Congress our official photographer and other delegates will make photos of the events and programmes. By participating on the Congress you agree to the publishing of any photographs you are appearing on. The official photographs will be published on the official website and Facebook site of the Congress.

Voluntaries: A lot of volunteers help in the organization of the Congress. Beside the specialists, both high school and university students participate in the preparation and the management of the event. In case someone cannot answer your question accurately, please note that you might have asked a volunteer. Still, we are very grateful for their help!

TRANSPORTATION

HOW TO ACCESS THE CITY FROM THE AIRPORT

By public transportation

From Liszt Ferenc International Airport take bus Nr. 200, which takes you to the terminus of Metro line M3 (Blue line) called Kőbánya-Kispest. Bus Nr. 200 departures right in front of the terminals. You can only board front door and you have to validate your ticket or show your pass to the driver. Bus ride takes cca. 20 minutes. Kőbánya-Kispest metro station is the final stop of the bus. The bus runs regularly, in every 10-15 minutes, during rush hours every 6-8 minutes. With Metro line M3 you can easily access the city centre. The Deák Ferenc tér metro station (where three metro lines meet) is about 25 minutes from Kőbánya-Kispest. *Route planner: www.bkk.hu/en/timetables*

By taxi

The only official service provider at the Liszt Ferenc Airport is called Főtaxi, operating with fixed tariffs available at their website: www.fotaxi.hu. Their counter can be found in front of the terminal, but on-line booking is also available. We highly recommend you to follow the official signs taped on the floor and signed on boards and only pay for the services provided by Főtaxi.

By shuttle bus

Shuttle bus services are operated by certain flight companies (e.g. Wizzair, Easyjet) and by the Budapest Airport. Website: www.airportshuttle.hu/en

HOW TO ACCESS THE CONGRESS VENUE

FROM THE CITY

The venue of the Congress is the Campus of Faculty of Sciences, Eötvös Loránd University, which is located on the Buda side of the Danube, South of Petőfi Bridge. The address is: 1117 Budapest, Pázmány Péter sétány 1/C. The Congress will take place in the Southern Block, which is the second (brownish) building approaching from the Petőfi Bridge.

By public transportation

The best and simplest way to access the venue is by using public transportation. Take tram 4 or 6 (which is the busiest line running along the Nagykörút connecting North and South Buda through Pest) until the station on the Buda side of the Petőfi Bridge (called: Petőfi híd Budai hídfő), from where it takes an easy 8-10 minutes walk to get to the Southern Block. Tram 4 or 6 runs 24/7 and have stops in numerous busy junctions, where you can change to metro lines (etc. Oktogon to M1 Yellow line], Blaha Lujza tér to M2 [Red line], Nyugati pályaudvar/Western railway station to M3 [blue line]).

By Bubi

Bubi is the city bicycle system in Budapest. Website of Bubi: molbubi.bkk.hu

By taxi

There are numerous taxi companies available. Preordered taxi is usually a little cheaper than stop one on the street. Always make sure that the taxi meter is turned on when you start the journey. Please note that taxis are not allowed to enter the campus, so you will still need to walk a little to reach the building.

By car

Parking places are available in front of the building.

FROM INTERNATIONAL AIRPORT

- take bus Nr. 200, which takes you to the terminus of Metro line 3 (Blue line) called Kőbánya-Kispest. (cca. 20 minutes)
- Change to metro line M3 until station called Corvin negyed (cca. 20 minutes)
- Change to tram 4 or 6 in the direction of Buda. Tram 4 runs towards Újbuda központ, while tram 6 runs towards Móricz Zsigmond körtér (cca. 8 minutes)
- Get off at station called Petőfi híd Budai hídfő and walk to the venue (cca. 8 minutes)

FROM KELETI PÁLYAUDVAR /EASTERN RAILWAY STATION

- get on metro M4
- get off at station Rákóczi tér (cca. 4 minutes)
- change to tram 4 or 6 in the direction of Buda. Tram 4 runs towards Újbuda központ, while tram 6 runs towards Móricz Zsigmond körtér (cca. 8 minutes)
- Get off at station called Petőfi híd Budai hídfő and walk to the venue (cca. 8 minutes)

FROM NYUGATI PÁLYAUDVAR /WESTERN RAILWAY STATION

- get on either tram 4 or 6 in the direction of Buda. Tram 4 runs towards Újbuda központ, while tram 6 runs towards Móricz Zsigmond körtér (cca. 20 minutes).
- Get off at station called Petőfi híd Budai hídfő and walk to the venue (cca. 8 minutes).

FROM DÉLI PÁLYAUDVAR /SOUTHERN RAILWAY STATION

- get on tram Nr. 61 in the direction of Móricz Zsigmond körtér (cca. 18 minutes)
- at Móricz Zsigmond körtér change to tram 6 (cca. 5 minutes)
- Get off at station called Petőfi híd Budai hídfő and walk to the venue (cca. 8 minutes).

FAQ ABOUT HUNGARY

What is the currency in Hungary?

Hungarian currency is called forint. One Euro is cca. 300 forints.

Can I use my bank card? Do I need to change some forints?

- Yes, Mastercard and Visa are the most accepted, but check the signs before entering a shop/restaurant. Pay-pass is also widely used.
- Still, it is a good idea to change some forints, because in some museums, ticket offices, kiosks, bars etc. only cash is accepted.

What are the basic words needed to get orientation in the city?

Hungarian language belongs to the Finno-Ugric language family and is a very distant relative of Finnish and Estonian. The inscriptions can be strange at first sight, so we provide you a list of the most important words, that might help you to make sense of street names and maps.

- út=road
- utca=street
- tér=square
- körút=boulevard

Basic greetings

- Good morning: Jó napot! (Yo napot!)
- Excuse me!: Elnézést! (Aelnezesht!)
- Sorry!: Bocsánat (Bochanat!)
- Thank you!: Köszönöm! (Khoesoenom!)

How can I use public transportation?

The public transportation is operated by BKK. All basic information is available on their website.

In Budapest tickets and passes are also available. The whole territory of Budapest functions as one zone.

Important to highlight that tickets are only valid for one ride and only in one direction, independently of the stops you are taking. This means that when you change between vehicles or means of public transportation you must validate a new ticket! The only exception is metro, where you can change freely and without any further payment between the lines.

Consequently, if you are willing to use public transportation often, it is much easier to purchase one of the passes. Passes are available for 24, 48, 72 hours or one week. Budapest Card, which gives you various discount, is also a good choice. To buy these you will need a valid identification document which's number will be printed on the pass.

Where to purchase tickets or passes for the public transportation?

Recently ticket machines were installed in almost every metro station, stations of tram 4 and 6 and major junctions. The machines are a comfortable and reliable option where you can buy not only single tickets, but the passes as well.

In all metro stations there are ticket offices where you can buy tickets, but you might face some linguistic difficulties. Single tickets are sold in some kiosks, newsstands.

Finally, it is possible to buy tickets on board, but only some of the buses. This is more expensive and you must give the exact amount to the driver! One ticket costs 350 Forints, if you buy it on board: 450

Important: at the airport there is a counter of BKK, where you can purchase all kind of tickets and passes. Once you left the terminal, there is only one ticket machine available at the bus stop of bus 200, so you might end up lining in front of it.

About ticket controlling

One evergreen topic of tourist feedbacks is ticket controlling. In Budapest metro lines tickets are still checked by ticket controllers who are standing in the station. You must show your ticket or pass to them every time. Sometimes there are further checking on the platforms. Ticket controllers can show up on buses, trams, trolley buses etc. You are highly recommended to keep your ticket and take good care of your pass all times, as you might face linguistic difficulties if any problem occurs.

KEYNOTE LECTURES

PLENARY 01

Location: Hungarian Academy of Sciences, Ceremonial Hall

Schedule: Monday, 31 August, 10:00–11:00

SOIL EROSION HAZARD AND MITIGATION IN THE EURO-MEDITERRANEAN REGION: DO WE NEED MORE RESEARCH?

Speaker: *Jean Poesen*, a geographer, is a full professor and head of the Division of Geography at KU Leuven (Belgium). He obtained a PhD in sciences (1983) at KU Leuven, a DSc in soil science and geomorphology (2009) at the University of Wolverhampton (UK) and a Dr.h.c. (Honorary Professor) of the Alexandru Ioan Cuza University of Iasi, Iasi, Romania (2013) and of the Maria Curie-Skłodowska University in Lublin, Poland (2014). He is a co-founder of the European Society for Soil Conservation. Currently, his research focusses on a better understanding of mechanisms and factors controlling land degradation, natural hazards, the impact of humans on landscape evolution in temperate humid, Mediterranean, and tropical environments, as well as on the optimization of soil and water conservation techniques and resilience with respect to natural hazards.

Abstract: Soil erosion represents a geomorphological and geological hazard that may cause property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Erosion not only lowers the quality of soils on site, resulting in a drastic reduction of their ecosystem functions that play a vital role in daily life, but causes also significant sediment-related problems off site. To curb soil erosion problems, a range of soil conservation techniques and strategies are applied. So far, ca. 7000 papers on soil erosion and ca. 15 000 papers on soil conservation in the Euro-Mediterranean region have been published (Web of Science, June 2015). One might therefore conclude that we now know almost everything about the various soil erosion processes, their factors and consequences as well as their control so that little new knowledge can still be added to the vast amount of available information. We will refute this conclusion by pointing to some major research gaps that need to be addressed if we want to use our soils in the Anthropocene in a more sustainable way and improve environmental conditions worldwide. More specifically the following research needs will be addressed: 1) improved understanding of soil erosion processes and their interactions, 2) scaling up soil erosion processes and rates in space and time, 3) innovative techniques and strategies to prevent or reduce erosion rates.

IMAGINED COMMUNITIES AND PRACTICED GEOPOLITICS

Speaker: *Herman van der Wusten* is an emeritus professor at the University of Amsterdam. He chaired the commission on political geography of the IGU during 1992-1996 and ended his term with a talk on 'The state political geography is in' (published in TESSG 1998), from which some of substance of the present talk derives. He is now mostly working on questions regarding the formation of political centers (their emergence, maintenance and demise). This September appears a Dutch language book on geopolitics written with Virginie Mamadouh.

Abstract: Current events in Ukraine can be analysed through a number of lenses: e.g. regional history, classical geopolitics, treaty obligations. Here I will consider the ongoing conflict in particular by way of two concepts that have played a prominent role in this kind of situation in recent decades: imagined communities and practiced geopolitics. I will particularly stress the importance of these imaginations in crossborder situations (diasporas, irredenta movements and the like) and the significance of the privatization of military force for the practice of geopolitics. To put the Ukraine case in perspective I will dwell on two kinds of comparison, one based on external and the other on internal similarities with the Ukraine. The externally oriented comparison looks at cases of states in between two more or less opposing larger ones where they can be crushed, can be part of a sphere of influence, act as a buffer or a gateway. The internally oriented comparison looks at the fate of fragile or failed states. Relations between imagined communities and practiced geopolitics are explored.

Location: Eötvös Loránd University, Room A

Schedule: Tuesday, 1 September, 13:30–14:45

MOBILITIES AND MIGRATIONS IN EUROPE: A PROBLEMATIC DICHOTOMY

Presenter: *Eleonore Kofman* is Professor of Gender, Migration and Citizenship and Co-Director of the Social Policy Research Centre at Middlesex University, UK. Her current research focuses on gendered aspects of international migration, in particular the experiences, policies and strategies of family migration in Europe, and on skilled migration policies. She is also writing a chapter on the new Southern European migrants to the UK and the discourses and debates this has generated. She has co-edited *Gender, Generation and Family in International Migration 2011*, University of Amsterdam Press and co-authored *Gendered Migrations and Global Social Reproduction*, 2015, Palgrave.

Abstract: For the past decade, a sharp dichotomy has emerged between mobility as unfettered or free movement within the EU (Directive 2004/38/EC), which stipulated that citizens of the EU and their family members have the right to move and reside freely within the territory of the EU, subject to certain conditions, on the one hand, and the largely restrictive rights to migration into EU states for third country nationals (TCNs), on the other hand. Other policies and funding streams, such as those pertaining to integration, have also stemmed from this distinction, in which the mobility of Europeans is deemed to be unproblematic compared to the monitoring, assistance and resources required by TCNs.

In this presentation I shall examine the problematic dichotomy differentiating mobility and migration and its recent collapse arising from the continuing large-scale movements from Eastern Europe and the newer Southern European flows to North-western Europe since the onset of the severe economic crisis. In a number of states, intra-European flows have generated considerable hostility and demands for imposing greater conditionalities on the right to residence, social entitlements and welfare nationalism. In the UK, in particular, one of the most popular destinations for Eastern and Southern Europeans, limitations on mobility will be a core issue in the referendum on the possible exit of the country from the EU (BREXIT).

CLOSED LOOP RECYCLING AND PHYSICAL GEOGRAPHY

Presenter: Professor *Michael A. Fullen* mainly investigates soil erosion, soil conservation, desertification and desert reclamation and his fieldwork is mainly based in Europe and Asia. He has published widely in Soil Science (one book, 212 refereed papers, 210 conference papers and 26 consultancy reports). Professor Fullen is also Honorary Professor at Yunnan Agricultural University (China) and an Academician of the Lithuanian Academy of Sciences. He is a referee for 48 journals and a member of the Editorial Board of 21 Journals. Professor Fullen has jointly supervised 24 Ph.D. theses to completion and been Examiner for 25 Ph.D. theses. He has received research grants from over 30 institutions, principally the European Union. He is also Vice-President, Councillor and Representative for the UK of the World Association for Soil and Water Conservation (WASWAC), Vice-President and UK Representative on the Council of the European Society for Soil Conservation (ESSC) and Editor-in-Chief of the ESSC Newsletter. Professor Fullen was Joint Winner of the 'Gerold Richter Prize' from the ESSC in May 2015.

Abstract: Several research projects spanning over three decades have provided insights into the importance of closed loop recycling in trying to minimize and eventually eliminate waste. These projects are:

- The “Sustainable Highland Agriculture in South-East Asia Project” (SHASEA). To promote sustainable agro-environmental development in the highlands of South-East Asia, an international multidisciplinary research team examined the effectiveness of selected agronomic and soil conservation treatments in Wang Jia Catchment in the highlands of Yunnan Province, south-west China.
- The “BORASSUS Project” evaluated the long-term effectiveness of biological geotextiles in controlling soil erosion and assessing their sustainability and economic viability, based on field and laboratory experiments in Africa, Asia, Europe and South America.
- The “Yuanyang Project” is investigating the agro-environmental sustainability of the ancient Yuanyang rice terraces of Yunnan Province, China.
- The “Cradle to Cradle BIZZ Project.” “Cradle to Cradle” (C2C) technology is an innovative approach that promotes and develops closed loop recycling systems. At the end of a useful life time, C2C items are disassembled and reassembled for other uses. The aim is that materials are not downgraded, but rather at least retain the same grade with the objective of upgrading materials. The “Cradle to Cradle BIZZ Project” specifically developed C2C protocols on industrial sites in north-west Europe.

Perhaps it is timely that we progress to imitate “nature” and recognize there is really no such thing as waste. We can develop effective “closed-loop recycling systems” which minimize waste or may even generate zero waste. Indeed, as we advance to C2C systems, we can recognize output from one system as a resource for another and that waste can become a resource. Given their integrative perspectives, it is postulated that Physical Geographers can make important contributions to the development of closed loop recycling systems and thus ultimately to sustainability in the broadest sense.

Location: Eötvös Loránd University, Room A

Schedule: Wednesday, 2 September, 13:30–14:45

KNOWLEDGE ENVIRONMENTS. SOME METHODOLOGICAL CONSIDERATIONS

Presenter: *Peter Meusbürger* holds a PhD in geography from Innsbruck University (Austria). In 1983 he was offered a chair of Social and Economic Geography at Heidelberg University. In 2007 he became the first Distinguished Senior Professor at Heidelberg University. His main research interests are spatial and social disparities of educational achievement; the nexus between knowledge and space; milieus of creativity; relations between knowledge and power; spatial "mobility" of knowledge; knowledge and economic performance, and related fields. Peter Meusbürger is editor of the series "Knowledge and Space". One of his recent publications is the *Wissenschaftsatlas of Heidelberg University: Spatio-Temporal Relations of Academic Knowledge Production* (in German 2011, in English 2012). He was awarded the Presidential Achievement Award of the Association of American Geographers in 2010.

Abstract: There exists broad consensus that science has a history. But does science also have a geography? Was science not supposed to be placeless? In recent years scholars have pointed out that the generation and diffusion of scientific knowledge is influenced by local knowledge environments and spatial relations, that scientific practices vary in different places, that universities are not simply locations but social spaces, epistemic venues, and knots of scientific networks with differing degrees of resources, authority, and reputation.

Talent, motivation, and wealth of ideas are not the only characteristics determining how successfully a scholar's research and academic career develop. A number of external factors come to bear as well, such as material and nonmaterial resources; the availability of research infrastructure; institutional regulations; formal organizational structures; integration in international networks; and not least the experiences, scientific stimuli, and critique of other scholars active at the same site. A university's knowledge environment is definable as the result of systematic interdependencies and causal interactions relevant for the generation and diffusion of scientific knowledge.

In my paper I address four questions: What elements make up a local knowledge environment? How can a local knowledge environment affect learning and research processes? How can an explanation of a knowledge environment's impact avoid the trap of determinism? How can we measure the impact of a knowledge environment?

CONVERGENCES AND DIVERGENCES OF GEOGRAPHIES FROM AN EAST-CENTRAL EUROPEAN PERSPECTIVE

Presenter: *Judit Timár* is a senior research fellow at the Centre for Economic and Regional Studies of the Hungarian Academy of Sciences in Békéscsaba and teaches at several universities (in Szeged, Debrecen and Gödöllő). She has held various visiting positions in Europe and North America. She was an editor of the 'European Urban and Regional Studies' and on the editorial advisory board of the 'ACME', the 'Gender, Place and Culture' and serves on three editorial boards of Hungarian social science journals. She was a full member of the Gender and Geography Committee of the IGU and still works as a member of the steering committee of the International Critical Geography Group. She has been working on suburbanization, gentrification, peripheralisation and gendered spaces of socialism and post-socialism. Her research interest focuses also on the peculiarities of knowledge production, especially in critical and feminist geographies in Hungary and East-Central Europe.

Abstract: In this paper I will revisit the European debate organised for the promotion of a real internationalization of academic discourses in geography more than a decade ago. Relying on the experiences of the special era of post-socialist transition in Hungary, my then point was that if there was convergence between the national "schools" of geography within Europe, then it was, at best, "uneven convergence". What are the recent tendencies, scales, dimensions and possible social results of convergences and divergences?

Discussing this question in the context of power relations I will concentrate on i) the changing practices and socio-economic sources of Anglo-American and/or Western hegemony in the geographical knowledge production in the enlarged European Union, ii) the growing diversity of epistemological approaches and the potential results of the generational differences in the positionalities, iii) the dangers of the divergence between theory and practice, academic and "lay" discourses.

PAPER SESSIONS

P01 A COHESIVE EUROPE IN 2020 – NEW INSTRUMENTS, NEW CONCEPTS, NEW TERRITORIES

Organizers: *Péter Balogh*, Institute for Regional Studies, CERS-HAS, Hungary; *Peter Schmitt*, Stockholm University, Department of Human Geography, Sweden

Location: Room E

Session description: Along with the new programme period for Cohesion Policy (2014-2020) a number of new instruments (Integrated development investments, Community led-local development), and programmatic concepts (e.g. the urban agenda) have been introduced in striving for a “smart”, “sustainable” and “inclusive” Europe. The need to integrate these into the hitherto established routines and mechanisms from former programme periods seems to be a challenging task. Also, the question arises to what extent these innovations comply to other recently established changes within the EU spatial policy-making such as the introduction of the “European Grouping of Territorial Cooperation” instrument, “macro-regions” or the promotion of maritime spatial planning. The session welcomes theoretical and empirical contributions dealing with one (or more) of the following questions:

- What kind of re-scaling processes are induced by the new Cohesion Policy or EU spatial policies in general? Which geographical scales are (dis)empowered (e.g. Brusis 2014)?
- What kind of efforts in terms of policy and process alignment (to the Cohesion policy) can be observed in various countries and regions across the EU (e.g. Dąbrowski 2014)? What sort of Europeanisation is on the move?
- What kinds of new modes of territorial governance are emerging?
- What “territorial shifts” can we observe and what are the inherent challenges, e.g. in view of cross-border cooperation (e.g. Balogh 2014), maritime/land-use planning, (new) macro-regions (e.g. Metzger/Schmitt 2012), functional regions versus hard spaces?
- To what extent can Cohesion Policy contribute to what kind of cohesion? Are new peripheries and centers/cores emerging (e.g. Lang 2011)?

SLOT1 TERRITORY, SOFT SPACE, AND POLICY

Chairs: *Péter Balogh*, Institute for Regional Studies, CERS-HAS, Hungary; *Peter Schmitt*, Stockholm University, Department of Human Geography, Sweden

Schedule: Wednesday, 2 September, 08:30–10:15

*Frédéric Santamaria**, *Bernard Elissalde*: Of the good use of the notion of “territory” for the Cohesion Policy

*Stepan Nosek**: Territorial Dimension of Cohesion Policy in EU Member States

*Estelle Evrard**: Place-based approach: institutionalising soft space

*Gyula Ocskay**: EGTC: a new discourse on space?

*Sara Svensson**: Nationally driven or community led? The role of EGTCs in the implementation of Cohesion Policy 2014-2020 in Central and Eastern Europe

SLOT2 PROCESSES AND IMPACTS OF EUROPEAN SPATIAL POLICIES

Chairs: *Péter Balogh*, Institute for Regional Studies, CERS-HAS, Hungary; *Peter Schmitt*, Stockholm University, Department of Human Geography, Sweden

Schedule: Wednesday, 2 September, 10:45–12:30

*Didelon-Loiseau Clarisse**, *Sophie de Ruffray*: World regionalization and European Union: a territorial experiment for the competitiveness and cohesion paradigms

*Stefan Telle**: EU Cohesion Policy and the (re)production of centrality and peripherality through soft spaces

*Bradley Loewen**: Contextualising regional policy for territorial cohesion in Central and Eastern Europe

*Eduardo Medeiros**: Territorial Impacts of the EU Cohesion Policy in Iberian Peninsula (1990-2010)

*Hunor Bajtalan**: Governance matters! Regionalisation and decentralisation in Romania

P03 APPLIED URBAN CLIMATE AND BIOCLIMATE

Organizers: *Krzysztof Fortuniak*, University of Lodz, Poland; *János Unger*, Dep. Climatology and Landscape Ecology, University of Szeged, Hungary

Location: Room I

Session description: With the increase of urbanization, a significant factor playing an important role in global warming, the scientific community has been required to provide solutions addressing the negative impact of climate and the general atmospheric environment on cities, along with the improvement of these conditions for humans. The urban heat island affects not only quality of life, but in many cases also affects morbidity and mortality. Urban planning plays a very important role in this, and various

studies have shown the importance of taking into account human thermal sensation in order to mitigate the negative consequences of urbanization and strengthen the resilience of the society. This session focuses on the measurement/modelling of thermal load patterns and human thermal sensation within urban agglomerations emphasizing the application possibilities. The presentations should deal with different scales and climatic contexts, all with the common theme of identifying the effect of different urban configurations on humans' health and well-being.

SLOT1

Chair: *Stevan Savic*, Climatology and Hydrology Research Centre, Faculty of Science, University of Novi Sad, Serbia

Schedule: Tuesday, 1 September, 08:30–10:15

*Daniela Arsenovic**, *Branislav S Djurdjev*: Changes in seasonal pattern of mortality and its relation with temperature: result for urban area of Novi Sad

*Judit Bartholy**, *Zsuzsanna Dezső*, *Csenge Dian*, *Rita Pongrácz*: Evaluation of urban climatological effects of district-level rehabilitation program

*Bartosz Czernecki**: Estimating solar energy potential in Warsaw

*Tamás Gál**, *Anita Bokwa*, *Petr Dobrovolny*, *Jan Geletic*, *Ágnes Gulyás*, *Monika Hajto*, *Brigitte Hollosi*, *Rafal Kielar*, *Michal Lehnert*, *Nóra Skarbit*, *Pavel Stastny*, *Marek Svec*, *János Unger*, *Miroslav Vysoudil*, *Jakub Walawender*, *Maja Zuvela-Aloise*: Mapping the Local Climate Zones and application it as a land use information for MUKLIMO urban climate model

*Jan Geletic**, *Michal Lehnert*: Delimitation of Local climate zones based on ZABAGED database in the Czech Republic

*Ioana Herbel**, *Antonio Flavius Ciupertea*, *Adina-Eliza C Croitoru**, *Gabriela Victoria Harpa*, *Ionuț Rus*: Atmospheric urban heat island detection by direct measurements in Cluj-Napoca city, Romania

SLOT2

Chair: *János Unger*, Dep. Climatology and Landscape Ecology, University of Szeged, Hungary

Schedule: Tuesday, 1 September, 10:45–12:30

*Michal Lehnert**, *Petr Kladiivo*, *Miroslav Vysoudil*: Heat stress in urban and suburban landscape and its spatial differentiation on the example of a medium-sized Central European city

*Dragan D Milošević**, *Tamás Gál*, *János Unger*: Thermal comfort observations in the City of Novi Sad (Serbia) in 2014

*Hadas Saaroni**, *Reuven Givati*, *Eldad Levi*, *Baruch Ziv*: “Environment to circulation” and “circulation to environment” approaches in the analysis of role of synoptic conditions and wind regime impact on PM concentration over the metropolitan area of Haifa, Israel

*Flóra Szkordilisiz**, *Lilla Égerházi*, *Tamás Gál*, *Ágnes Gulyás*, *Márton Kiss*: Towards climate conscious urban design – developing a system of planning criteria in Hungary

*Nóra Skarbit**, *János Unger*, *Tamás Gál*, *Stevan Savic*: Intra-urban climate observations in two Central European cities based on one year network datasets

*Stevan Savic**, *Ivana Bajanski*, *Dragan D Milošević*: Evaluation of outdoor thermal comfort in urban transformations of Novi Sad (Serbia)

P04

ART, SPATIAL EXPERIMENTATION AND KNOWLEDGE PRODUCTION

Organizer: *Jaroslav Biolek*, Masaryk University, Czech Republic

Location: Room H

Session description: Geographical research over the last decade has seen an upsurge in interest in arts. The critical potential of arts as tools for knowledge production is increasingly taken into account in scientific debates. This session aims at considering the spatial experimentations implemented in geographical research that deals with arts and challenges classical methodologies by means of arts. What can geographers learn from the integration of arts into their research protocols and how to work with arts within scientific research? What kind of critical knowledge can be produced through artistic spatial experiments and geographical artistic performances? This session welcomes papers that critically attend to two major issues that reflect broader concerns about the place and role of arts in scientific, social and political debates:

- Spatialities of artistic spatial experiments: What socio-spatial contexts of implementation can be identified considering artistic spatial experiments; How does artistic spatial experiment contribute to transform social spaces and places, in terms of embodiment, time-space perception, social and political engagement?
- Knowledge production and the integration of arts: How are the different actors – researchers, artists, targeted people and groups etc. – involved in the processes of spatial knowledge production? What are the ethical and deontological stakes of such experiments? Can art destabilize classical methodologies in geography and help frame new (in-) disciplinary challenges?

SLOT1

Chair: *Jaroslav Biolek*, Masaryk university, Czech Republic

Schedule: Wednesday, 2 September, 08:30–10:15

*Jaroslav Biolek**, *Katarína Tulaková*: Exploring epistemology of psychogeography – Experiences from mental mapping workshops

*Laura Lo Presti**: Maps Out of Place: displacing cartography in the realm of contemporary art

*Santiago Pedraza Humildad**: Sensitive Landscape Border Lines

Pop Ana-Maria, Lelia Papp*: The Impact of Cultural Prosumers in Redefining the Image of Cluj-Napoca City

Carlo Salone, Sara Bonini Baraldi, Giangavino Pazzola*: Cultural production and consumption networks in peripheral urban spaces: lessons from Barriera, Turin (Italy)

P05 BENEFITS OF REMOTE SENSING FOR GEOGRAPHY

Organizer: *Márton Deák*, Eötvös Loránd University, Hungary

Location: Room I

Session description: Remote sensing became one of the fastest evolving and most versatile tools in geography. The applications are ranging from land and surface cover classification to digital elevation modeling, the applied sensors from LiDAR to hyperspectral imagery, and the methods from segmentation to classification. In the past few years new sensors were developed which are in the field, airborne or spaceborne. They also grew in numbers and became technologically more advanced, but in the meantime they also became more available for the researchers across Europe. In conclusion RS data sources also became more available for the public, which result a growth of freely accessible data sources – including the 32 years old Landsat heritage and the updated SRTM dataset, today they are allowing new, previously only costly studies. Presenters will talk about new data processing methods, software solutions and sensors, and also about new ideas for old data sources which were previously applied mostly outside of geography.

SLOT1

Chair: *Márton Deák*, Eötvös Loránd University, Hungary

Schedule: Monday, 31 August, 17:15–19:00

*Péter Braunmüller**: Gateway to the Hungarian aerial photo archive of FÖMI

*Gianluca Casagrande**: Low-Altitude Airborne Remote Sensing by Microlights and Microdrones: New Powerful Tools in Geographic Research

*András Sik**: Web-based GIS applications in planetary landform analysis

*Slave Camelia**: Influence of human activities on the landscape of the Danube Delta

Katalin Takács, László Pásztor*: Spatial characterization of soil properties by digital soil mapping – examples from the Carpathian Basin

P07 CHALLENGING BORDERS: A CRITICAL PERSPECTIVE ON THE RELATION BETWEEN STATE, TERRITORY, CITIZENSHIP AND IDENTITY

Organizers: *Anna Casaglia*, University of Eastern Finland, Finland; *Jussi Laine*, Karelian Institute, University of Eastern Finland, Finland

Location: Room E

Session description: The session will explore the critical re-reading and understanding of borders as resources in terms of the exercise of power, the management of conflict, cross-border co-operation, and the everyday negotiation of borders by local actors. The aim is to shed light especially on tensions between national understandings in terms of demarcations based on ethnicity, citizenship, language and socio-cultural characteristics, etc., and broader supranational/transnational understandings which address borders as areas of contact (and, to an extent, transition) between civilisations, religious and cultural spheres. Challenging the very concept of borders means to re-discuss the way in which states, territories, citizenship and identity relate to each other. We welcome contributions addressing original analytical, theoretical and methodological ways of understanding borders as tools for framing social and political action and their impact at various spatial levels of socio-cultural, political and economic interaction.

SLOT1

Chair: *Anna Casaglia*, University of Eastern Finland, Finland Discussant: *Jussi Laine*, Karelian Institute, University of Eastern Finland, Finland

Schedule: Tuesday, 1 September, 08:30–10:15

*Matteo Berzi**: Local cross-border cooperation as a territorial strategy for the re-territorialization of peripheral regions? Cases studies in the Eastern Pyrenees?

*Edward Kieran Boyle**: “New Berlin Walls” and walling up sovereignty at the border

*Hans-Joachim Bürkner**: Disquiet at European borders: Scaling, geopolitics and everyday bordering

Anna Casaglia, Jussi Laine*: Challenging borders: a critical perspective on the relation between state, territory, citizenship and identity

*Tim Cassiers**: Brussels as a cross-border metropolitan region

SLOT2

Chair: *Anna Casaglia*, University of Eastern Finland, Finland Discussant: *Jussi Laine*, Karelian Institute, University of Eastern Finland, Finland

Schedule: Tuesday, 1 September, 10:45–12:30

*Anabella Ascensión Cordero Luciano**: From the number to the name: Revealing the lost identities of the border

*Stanislaw K. Domaniewski**, *Martin Barthel*: A comparative analysis of life in Polish Border towns at the EU's external border

*David Karácsonyi**, *Ágnes Eröss*, *Áron Kincses*, *Kostyantyn Mezentsev*: Armed conflict, identity and outmigration – Ukraine before and after 2014

*Concepcion Lapayese**, *Manuel Gazapo Lapayese**: Borderscapes: (de)constructing the edges of EU

*Ilkka Liikanen**: European Neighbourhood as Political Innovation: EU Policies of Cross-Border Cooperation and Visions of a New Post-Cold War World Order

SLOT3

Chair: *Anna Casaglia*, University of Eastern Finland, Finland Discussant: *Jussi Laine*, Karelian Institute, University of Eastern Finland, Finland

Schedule: Tuesday, 1 September, 15:00–16:45

*Siarhei Liubimau**: The politics of scale in the EU trans-border revitalization projects

*Gyula Ocskay**: Borders: historicity of space/territoriality of time

*Roser Pastor Sabert**: The de-bordering process over the landscapes. A land use and cover analysis of a Pyrenean border region: the central area of the Cross-border Catalan Space

*Márton Pete**: Territory: a very bordered concept

*James W Scott**: Borders as negative freedom? Ethical dilemmas of bounding social space

SLOT4

Chair: *Anna Casaglia*, University of Eastern Finland, Finland Discussant: *Jussi Laine*, Karelian Institute, University of Eastern Finland, Finland

Schedule: Tuesday, 1 September, 17:15–19:00

*Gianluca Simi**: Is it possible to decolonise the border? An essay on the epistemology of coloniality at interstate borders

*Nicolai Teufel**: Territories, places and scales in motion. Civil society initiatives along the Polish-German border

*Ivana Venier**: Border as problems. But for whom?

*Marta Zorko**: Transforming borders in the Western Balkans – Methodology concept for research in post-conflict borderlands

P08

CHANGING WORLD, CHANGING HUMAN MOBILITIES: GLOBAL CONVERGENCE AND DIVERGENCE

Organizers: *Sándor Illés*, Active Society Foundation, Hungary; *Gábor Michalkó*, Geographical Institute, Hungarian Academy of Sciences, Hungary; *Dallen J. Timothy*, Arizona State University, United States

Location: Room K

Session description: The relationships between humankind and the environment have been determined by changes since the beginning of time. The development of humankind is characterized by the process of adaptation to change, in which mobility—despite its well-known limitations—has always played a prominent role. Nowadays, the speed of societal change has accelerated to a pace the world has never witnessed before. Standard obstacles to human mobility are rapidly becoming a thing of the past. Means of communication, the free movement of persons and their freedom to work, the improvement of language skills, the infrastructure of transportation and other variables stimulate mobility, but mobility is demonstrating new, lesser-known features and effects as well. Mobility simultaneously exhibits characteristics of convergence (e.g. globalisation, integration, lifestyle) and divergence (e.g. national values, religiosity, local and regional traditions) on the global stage. Exploring and analysing the processes that create these dichotomous conditions is the proposed task of the IGU “Globility Commission”. We expect to receive Europe-focused abstracts that examine the latest trends in domestic and cross-border mobilities. We welcome research results that deal with the causes, characteristics and effects of mobilities convergence and/or divergence observed in the context of migration, tourism or transportation.

SLOT1

Chair: *Dallen J. Timothy*, Arizona State University, United States

Schedule: Monday, 31 August, 13:00–14:45

*Dóra Bálint**: Emerging forms, spatial and social aspects of networked mobility

*Birgit Glorius**: The challenge of diversity through migration: the case of Saxony

*József Lennert**: Changing rural migration patterns after the political and economic transition in the Visegrád countries

*Armando Montanari**: Human mobility and information technology, a more and more integrated cause and effect phenomenon

*István Süli-Zakar, Mihály Tömöri**: Changing human mobility of the East-Central European poor strata with special regard to the Roma

*Baiba Svane**: Residential differentiation and mobility in Post-Soviet city: the case of Riga, Latvia

SLOT2

Chair: *Armando Montanari*, Sapienza Rome University, Italy

Schedule: Monday, 31 August, 15:15–17:00

*Camilla Spadavecchia**: Migration of highly skilled women from Sub-Saharan Africa to Europe: flows, strategies and social remittances.

Sándor Illés, Áron Kincses*: The effects of economic crisis on the international circular immigration related to Hungary

Zaiga Krisjane, Daniel Goeler, Andreas Winkler*: Shifting migration system: Latvian migrants in Germany

Beáta Szilasi Siskáné, Tibor Kóródi*: The new experiences of methodology and fieldwork in research of migration processes in Hungary

*Márta Bakucz, András Bozóti**: The role of Guest-cards in developing "Slow Tourism" in Austria and Hungary

Mónika Jónás-Berki, Krisztina Buzsik, Ádám Köbli, Júlia Papp*: Local perceptions and attitudes towards tourism: Hungarian case studies

SLOT3

Chair: *Barbara Staniscia*, Sapienza University of Rome, Italy

Schedule: Monday, 31 August, 17:15–19:00

János Csapó, Antal Aubert, Géza Szabó*: Recreational and tourism-purpose mobility along border regions: the South Transdanubian (Hungary) case

Anita Zátori, Dániel Balizs, Noémi Kulcsár, Gábor Michalkó, Judit T. Nagy*: The role of tourist experience in Hungary's domestic VFR travels

Robert Nadler, Annedore Bergfeld*: Back to back, or shaking hands? Post-enlargement cross-border labour mobility in the border triangle Germany-Poland-Czech Republic

*Botond Palaczki**: A call for new transport geographies in Hungary – the case study of the genderization of Hungarian automobility

*Dallen J. Timothy**: Mobilizing boundaries: Tourism as a stimulus for transforming forms and functions of international borders

*Yoshimichi Yui**: Recruitment information for overseas working Japanese in Germany: Activities of recruitment agencies

SLOT4

Chair: *Sándor Illés*, Active Society Foundation, Hungary

Schedule: Tuesday, 1 September, 08:30–10:15

Ģirts Burgmanis, Iveta Spróģe*: Spatial mobility and accessibility of education in countryside: youth's school travel in rural Latvia

*Slaven Gasparovic**: Transport disadvantage: differences between female and male high school students of the City of Zagreb

Gábor Hegedűs, Gábor Lados*: An analysis of policies and initiatives supporting highly skilled return migration in Hungary

Gyöngyi Kovács, Agnes Kerekesne Mayer*: The appeared of sustainability in the Hungarian higher education of tourism

Barbara Staniscia, Armando Montanari*: Young Italians on the move: who they are, why they move, where they go

SLOT5

Chair: *Tamara Rátz*, Kodolányi János University of Applied Sciences, Hungary

Schedule: Tuesday, 1 September, 10:45–12:30

*Bulcsú Remenyik, Csilla Szalók, István Kővári**: The use of statistical databases and consumer confidence indices in the measurement of the development of touristic regions

*Judit Sulyok**: The Phenomena of Tourism Seasonality – Case Study of the Lake Balaton (Hungary)

*Erika B. Pristiyák**: Viable grouped farmsteads

Dorina Camelia Ilieș, Morar Cezar, Herman Grigore, Alexandru Ilieș, Buhar Raluca*: The impact of tourism in the evolution and dynamics of the Peștea Stream Nature Reserve, Bihor County, Romania

Agnes Kerekesne Mayer, Gyöngyi Kovács*: Hungarian cheese routes and their role in tourism. Local cheese in sustainable gastronomy

Katinka Szabó, László Gyuricza, Géza Szabó*: Valorisation of rural heritage in tourism

SLOT6

Chair: *Anna Irimiás*, Kodolányi János University of Applied Sciences, Hungary

Schedule: Tuesday, 1 September, 15:00–16:45

Istvan Talabos, Eva Nagy*: Travel and customer habits changes of the Visegrad Group since 2010

*Endre György Bártfai**: New trends at the Budapest hotel market 2000–2014

Melinda Jászberényi*, Zsuzsanna Fehé, Dorottya Bodnár*: Cultural Tourism and Museums in Budapest
 Katalin Juhász-Dóra*, Katalin Ásványi, Melinda Jászberényi, Gábor Michalkó: The role of renewable energy in the hotel competitiveness
 Adrienne Nagy, Diána Dóra Kiss*, Csilla Petykó: Creative Budapest
 Zoltán Bujdosó*: The role of tourism in the urbanization in Northern Hungary

P09 CLIMATE CHANGE ADAPTATION AND DISASTER RISK REDUCTION INTEGRATION: A MULTI-DISCIPLINARY AND MULTI-SCALAR PERSPECTIVE

Organizers: Sara Bonati, Università degli Studi di Padova, Italy; Giuseppe Forino, University of Newcastle, Australia

Location: Room I

Session description: The Fifth Assessment Report by IPCC and the post-Hyogo 2015 framework by UNISDR have recognized the increasing role of climate change in exacerbating and generating disaster risks. Accordingly, the debate about the integration of Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) is also growing among researchers and policy-makers. In particular, scholars have investigated related barriers, challenges and opportunities as well as its crucial role in reducing vulnerability and enhancing sustainability, resilience and development. Therefore, this session aims to investigate, with a multi-disciplinary and multi-scalar perspective, theoretical frameworks and case studies related to; barriers, challenges and opportunities of this integration, as well as its connections with key-words such as vulnerability, sustainability, resilience and development.

Based on these premises, suggested topics include, but are not limited to:

- National Adaptation Strategies/Plans and DRR
- Regional/rural/urban strategies/planning
- Climate change and disaster diplomacy
- Policy and politics
- Governance and stakeholders
- Role of economic sectors
- Local communities, participation and conflicts
- Island studies perspectives
- New climate-related risks and disasters.

References: Birkmann J, von Teichman K., 2010, Integrating disaster risk reduction and climate change adaptation: key challenges—scales, knowledge, and norms, *Sustainability Science*, 5:171-184

Birkmann J., Pardoe J., 2014, *Climate Change Adaptation and Disaster Risk Reduction: Fundamentals, Synergies and Mismatches* pp. 41-50, in Glavovic B. P, Smith G. P, (eds.), *Adapting to Climate Change. Lessons from Natural Hazards Planning*, Dordrecht: Springer

Schipper L., Pelling M., 2006, Disaster risk, climate change and international development: scope for, and challenges to, integration, *Disasters*, 30(1): 19-38

SLOT1

Chairs: Sara Bonati, Università degli Studi di Padova, Italy; Giuseppe Forino, University of Newcastle, Australia

Schedule: Monday, 31 August, 13:00–14:45

Federica Appiotti*, Fausto Marincioni: Resilience and adaptation to climate change: a strategy to improve the role of Civil Protection in Italy

Viktória Blanka*, Zsuzsanna Ladányi, György Sipos, József Szatmári, Péter Szilassi: Assessing the relation between geographical exposure to hydrological climate extremes and the perception and understanding of the farmers and public

Eva A. Bogdan*, Andrew Wilson: Disaster governance: An investigation of the 2013 flood in High River, Alberta

Giuseppe Forino*, Graham Brewer, Jason von Meding: A hybrid governance framework for Climate Change Adaptation and Disaster Risk Reduction integration

Karlee Johnson*, Richard J.T. Klein, L. Schipper, F. Thomalla, G. Vulturius: Linking DRR, adaptation and development to address the underlying causes of risk

SLOT2

Chairs: Sara Bonati, Università degli Studi di Padova, Italy; Giuseppe Forino, University of Newcastle, Australia

Schedule: Monday, 31 August, 15:15–17:00

Stefano Malatesta*, Marcella Schmidt di Friedberg: Beyond the "Narrative of Fear": a multi-scalar reading of environmental changes in the Maldives

Judit Pappne Vancso*, Laura Bertalan, Mónika Hoschek, Ferenc Jankó, Nikolettta Németh: From adaptation to ignorance: climate change attitude of Hungarian farmers

Marjolein Spaans*, Bas Waterhout: Building up resilience in cities world-wide – Rotterdam as participant in the 100 Resilient Cities programme

Fausto Marincioni, Fulvio Toseroni: Emergency threshold index: a way to measure and map community resilience to climate change

Csaba Vaszko*: Adapting to climate change using market based solutions in the Danube-Carpathian Region

P10 COMPLEX SYSTEMS, COGNITION AND TERRITORIAL PLANNING

Organizers: *Jorge Rocha*, University of Lisbon, Portugal; *José António Tenedório*, Universidade Nova de Lisboa, Portugal

Location: Room D

Session description: The last four decades have witnessed the emergence of complexity theories of territory. These theories are becoming increasingly important within a variety of disciplines. As planners struggle with how to consider the instances of the real world when putting together proposals for future development, they question how complexity, cognition and complex systems might prove useful with regard to territorial planning. Territories differ from natural complex systems in being dual complex systems in four points: i) are hybrid, artificial-natural complex systems; ii) are part of the environment with which they interact, and at the same time, are an environment for the people acting in it; iii) are an outcome of internal representations that came from the mind of people, i. e. cognition; iv) the territory as a whole is a complex system and each of its agents is also a complex system. As a result of the specific character of territory as dual complex systems we have to include the cognitive capabilities of the agents in theorizing and simulating the dynamics of territories. From the cognitive approach arises: i) a new perspective on the relations between planners and the inhabitants; ii) a new form of planning behavior that typifies agents; iii) and that planning is seen as an integral element of territorial dynamics. Most of our models do not deal with the range of decision-making seen in planning and do not reflect the actual process of land development. This session intends to discuss and analyze complex and/or cognitive models that link space to agency forming the basis for planned actions.

SLOT1 TERRITORIAL PLANNING

Chair: *Jorge Rocha*, University of Lisbon, Portugal

Schedule: Tuesday, 1 September, 15:00–16:45

*Anita Andó**, *Nikolett Bodnár*, *György Gyuricza*, *István Zsámbok*: Urban geology map series of Budapest (District X)

*Milan Husar**, *Maros Finka*, *Lubomir Jamecny*: Respond on fuzzy responsibilities in the cross-border management of Alps-Carpathian eco-biocorridor

*Eduardo Jonas Gomes**, *Patrícia Abrantes*, *Arnaud Banos*, *Inês Fontes*, *Jorge Rocha*: Agent Based Model for agricultural areas in the metropolitan regions context

Inês Boavida-Portugal, *Carlos Cardoso Ferreira*, *Jorge Rocha**: Complexity in tourism systems: Newtonian or Reductionist paradigm to explore components, interactions and behaviours

SLOT2 SOCIO-SPATIAL URBAN ENVIRONMENT

Chair: *Jorge Rocha*, University of Lisbon, Portugal

Schedule: Tuesday, 1 September, 17:15–19:00

*Teodora Nikolić**: Disproportions in the urban system of Republic of Serbia and development possibilities in the contemporary terms of urban development

*Girts Burgmanis**, *Jurgis Škilters*: Place mapping, social values and territorial planning: the role of socio-spatial knowledge in spatial planning of urban environment

*Michal Rosol**: Working poor in European Union

P11 DEMOGRAPHIC CHANGE – CONCEPTUAL DEBATE AND REGIONAL IMPLICATIONS

Organizers: *Birgit Glorius*, Chemnitz University of Technology, Germany; *Birgit Leick*, University of Bayreuth, Economic Geography, Germany

Location: Room B

Session description: The proposed session deals with the highly topical issue of demographic change, which includes processes of population ageing, decline and increasing heterogeneity across Europe. The session will focus on the local and regional implications of demographic change, trying to elaborate new conceptual approaches and connect them with European best-practice examples that are suited to produce positive connotations of regional change perspectives. To this aim, the session concentrates on the following themes: Conceptual approaches: Which conceptual approaches to demographic change go beyond “container-space” perspectives? How can the phenomenon be integrated in the contemporary debates in human geography after the cultural, spatial and institutional turn, and what are the results of such theorizing? Which effects do the overall negative connotations of the phenomenon produce in the public and scholarly discourse? Are there any positive connotations and interpretations of demographic change? Local-regional “coping strategies” in the context of the debate: How can initiatives and projects at the local or regional level to develop shrinking regions be connected with this debate? Can we obtain new strategic expertise from a critical reflection of regional case studies in Europe? How can non-governmental actors such as space pioneers, entrepreneurs and other stakeholders/individuals contribute to regional development processes of shrinking regions? The proposed session thus welcomes both conceptual and empirical contributions of ongoing or recently completed research in the fields.

SLOT1

Chair: *Birgit Glorius*, Chemnitz University of Technology, Germany Discussant: *Birgit Leick*, University of Bayreuth, Economic Geography, Germany

Schedule: Tuesday, 1 September, 15:00–16:45

*Ineta Grīne**, *Elīna Apsīte-Beriņa*, *Undīne Grigorjeva*: Seasonal residents and settlement in rural areas of Latvia

*Zenija Kruzmetra**, *Dina Bite*: Cultural environment as potential for society renewal

*Gábor Pirisi**, *Bernadett Deák*, *András Trócsányi*: Demographic decline: challenges and responses in shrinking small towns of Hungary

*Tadeusz Stryjakiewicz**: Urban shrinkage and the post-socialist transformation

P12 DEPERIPHERALISATION: ADAPTATION, STRATEGIES AND POTENTIALS OF PERIPHERALISED REGIONS IN CEE

Organizers: *Jozsef Benedek*, Babes-Bolyai University, Faculty of Geography, Cluj-Napoca, Romania; *Thilo Lang*, Leibniz Institute for Regional Geography, Germany

Location: Room C

Session description: Although often receiving only marginal attention in national development strategies, non-metropolitan, rural and peripheral areas are home to almost half of the European population. They bear major spatial functions and in many cases play a decisive role in political decision processes as well as regarding social and economic innovation. Peripheralised regions cannot (only) be seen as victims of overarching global, European or national macro processes and developments. Questioning current paradigms, which regard the city as the major centre for social, economic and political innovation, the session invites participants to perceive also peripheralised areas as active arenas within which future development perspectives arise. Against this background, the presentations in this panel examine local strategies of dealing with uneven spatial development as well as innovative activities from civil society and businesses in peripheralised spatial settings. They analyse their potential for new forms of regional development and bottom-up social, economic and policy change.

SLOT1

Chair: *Jozsef Benedek*, Babes-Bolyai University, Faculty of Geography, Cluj-Napoca, Romania Discussant: *Thilo Lang*, Leibniz Institute for Regional Geography, Germany

Schedule: Tuesday, 1 September, 15:00–16:45

*Hunor Bajtalan**: Back on track! Deperipheralising Székelyland via regionalisation and the establishment of administrative-territorial autonomy?

*Sorin Cebotari**: Assessing renewable energies' impact on local community development

*Paola Coratza**, *Doriano Castaldini*: Geotourism initiatives: some examples from Modena Apennines (Northern Italy)

*Gábor Dudás**, *Gabor Nagy*: Marginality and dependency – Changing social and economic functions of rural spaces with scattered farmsteads and its drivers

*Martin Graffenberger**: Coping with peripherality. External knowledge acquisition and innovation activities of businesses in peripheral settings

*Martiene Grootens**: Public leaders shaping regions? Analyzing practices, relations and discourses of public leaders in (de)peripheralizing regions of Estonia and the Czech Republic

SLOT2

Chair: *Thilo Lang*, Leibniz Institute for Regional Geography, Germany Discussant: *Jozsef Benedek*, Babes-Bolyai University, Faculty of Geography, Cluj-Napoca, Romania

Schedule: Tuesday, 1 September, 17:15–19:00

*György Kocziszky**, *Dóra Szendi*: The effects of monetary easing on the spatial convergence in Hungary

*Melinda Mihály**: The role of social entrepreneurship in rural development – A comparative study between Hungary and Germany

*Csaba Patkós**: Specialities in the institutionalization of Hungarian LEADER local action groups

*Garri Raagmaa**, *Anne Keerberg*: Regional higher education institutions and leadership in the regional development of peripheries

*Martin Spacek**: Deperipheralisation within the EU Multilevel Governance Environment?

P13 EMERGING ECONOMIC SPACES, INDUSTRIES AND TRENDS

Organizers: *Éva Kiss*, Geographical Institute HAS, Hungary; *Neil Reid*, University of Toledo, United States

Location: Room G

Session description: These sessions will focus on new and emerging economic spaces, industries, and trends. The space economy is constantly changing with the result that new industrial sectors/industries are emerging, new economic trends are appearing, and places which were previously relatively unimportant to the space economy are emerging and playing an increasingly important role. The purpose of these sessions is to identify some of the more interesting and potentially impactful changes that are occurring

with respect to new industries, economic trends, and emerging space economies. These changes can and do occur at a variety of geographic scales from neighborhood to international and the geography of their impacts can be equally wide-ranging. A special session can be dedicated to the changes in postsocialist economies and economic spaces.

SLOT1 RELOCATION OF ECONOMIC ACTIVITY IN CENTRAL AND EASTERN EUROPE

Chair: *Neil Reid*, University of Toledo, United States

Schedule: Monday, 31 August, 13:00–14:45

*Magdalena Dej, Maciej Huculak, Wojciech Jarczewski**: Relocation of economic activity within metropolitan areas in Poland. Scale and key drivers

*Éva Kiss**: Relocation in the Hungarian industry

Norbert Petrovici, Titus Man Cristian, Ciprian Moldovan, Rusu Raularian*: Relocation of economic activity in Cluj County: The Making of a Service City Hinterlands

*Gergely Jozsef Török**: Traditional industrial spaces, new economic trends – the evolving specialization of the Transylvanian regions

SLOT2 LAND, INNOVATION, AND EMERGING ECONOMIC SPACES

Chair: *Piotr Pachura*, Częstochowa University of Technology, Poland

Schedule: Monday, 31 August, 15:15–17:00

Marie-Caroline Vandermeer, Jean-Marie Halleux*: Impact of Economic Land Prices on Business Productivity and Regional Economic Development in Wallonia

Irma Booyens, Christian M. Rogerson*: Creative tourism in Cape Town: an innovation perspective

Yvonne Franz, Michael Friesenecker*: New social spheres in economic spaces

Neil Reid, Piotr Pachura*: Emerging Trends in the European Beer Industry

P14 ENVIRONMENTAL GEOGRAPHY

Organizers: *André Evette*, Irstea, France; *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Location: Room J

Session description: Environmental geography is the type of geography that is specialized in addressing the relationship between human beings and the environment, in particular, the natural resources. This discipline has several specialty groups that bridge the human/physical divide in relevant ways. The most known branches are Energy and Environment, Hazards, Landscape Sensitivity and Human Dimensions of Global Change specialty groups. This session is dedicated to the interactions of physical environment and human activities. Participation of young scientists and PhD students is encouraged.

SLOT1

Chair: *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Schedule: Monday, 31 August, 13:00–14:45

*Drago Perko, Mauro Hrvatin, Rok Ciglič**: Landscape diversity and hotspots of Slovenia

*Filip Gulan**: Spatial quality as common denominator of novel integrated concepts for renewable energy development

Adam Harmat, Gábor Csüllög, Gergely Horváth, Dániel Meleg, Béla Munkácsy, Mária Szabó, László Tamás*: Energy use in the Bükk LEADER Region

Borbála Hortobágyi, Andreas Burkart, Dov Corenblit, Jean-Luc Peiry, Johannes Steiger, Franck Vautier*: 3D diachronic survey of riparian vegetation dynamics by photogrammetric methods: application of UAV and small airplane photographs

Márton Kiss, Ilona Bárány-Kevei, Szilárd Czóbel, Miklós Kiss*: Land use optimization with genetic algorithm, using the methodology of evaluating ecosystem services

SLOT2

Chair: *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Schedule: Monday, 31 August, 15:15–17:00

János Mika, Zoltán Murányi, Csaba Patkós, Zoltán Utasi*: Observed air pollution specifics of the valley-based towns in Hungary
*László Miklós**: Geosystem-landscape-environment: convergences or divergences?

Luca Simone Rizzo, Raffaella Gabriella Rizzo, Filippo Smerghetto*: Land-use pressures on rural-urban territories, highly suited for wine production. Mapping landscape services and trajectories of change in Northern Italy

Zalán Tobak, József Szatmári*: Environmental monitoring supported by aerial and field survey - A case study on the wildfire near Bugac
*Boudewijn van Leeuwen**: Towards a drought early warning system based on a combination of satellite and in situ soil moisture measurements

SLOT3

Chair: *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Schedule: Monday, 31 August, 17:15–19:00

*Aleksandra Gajic**, *Branko Protic*: Landscape evaluation for tourism purposes - case study of National Park “Derdap”, Serbia
*Gergely Horváth**, *Gábor Csüllög*, *Béla Munkácsy*, *Mária Szabó*, *László Tamás*: Investigation of landscape load caused by mining activities on a Hungarian industrial region

*Péter Csorba**, *Teodóra Bata*, *Gábor Mezősi*: Mathematical method for measuring the similarities of Hungarian microregions

P16 GEOGRAPHICAL EDUCATION

Organizers: *Péter Bagoly-Simó*, Humboldt-Universität zu Berlin, Germany; *Gergely Horváth*, Department of Environmental and Landscape GeographyInstitute of Geography and GeosciencesEötvös Loránd Univesity, Hungary; *Mariann Makádi*, Hungary

Location: Room K

Session description: The expected presentations will encompass the theoretical and practical questions of the geographical education of different levels, with special respect to the modern methods.

SLOT1 TEXTBOOKS AND CURRICULA

Chair: *Péter Bagoly-Simó*, Humboldt-Universität zu Berlin, Germany Discussant: *Gergely Horváth*, Department of Environmental and Landscape GeographyInstitute of Geography and GeosciencesEötvös Loránd Univesity, Hungary

Schedule: Wednesday, 2 September, 08:30–10:15

*Anett Kádár**, *Andrea Farsang*: Comparing the geographical misconceptions of high school students and university undergraduates

*Teresa Sadoń-Osowiecka**: Possibilities of Learning Geography without Handbooks

*Yvonne Behnke**: Visual literacy and geography textbooks – Eye-tracking study

Mariann Makádi, *István Arday*, *Gergely Horváth**: Renewal of the methodology of the geographical education by using new generation of textbooks

*Zoltán Ginelli (Gyimesi)**: Globality and Eurocentric narratives in Hungarian higher education

*Péter Bagoly-Simó**: 25 Years Later: Geography Education in Post-Socialist Europe

SLOT2 GEOGRAPHICAL KNOWLEDGE AND SKILLS

Chair: *Péter Bagoly-Simó*, Humboldt-Universität zu Berlin, Germany Discussant: *Gergely Horváth*, Department of Environmental and Landscape GeographyInstitute of Geography and GeosciencesEötvös Loránd Univesity, Hungary

Schedule: Wednesday, 2 September, 10:45–12:30

Erika Homoki, *László Sütő**: Geographical knowledge of countries in the Carpathian Basin

*Gergely Horváth**, *Judit Visi*: Environmental attitude, environmental education and geographical education

Mariann Makádi, *Gergely Horváth**: See, not only look at! Observations and investigations in geographical education

*Bertalan Péter Farkas**, *Ildikó Éva Kovács*, *Aranka Mészáros*, *Gyula Nemeskéri*: Financial literacy among 15-17 years old secondary school students – the relevance of the economical education

*David Örbring**: Abilities in geography in compulsory school in Sweden – an international comparative perspective

*Markus Tapani Hilander**: Taking a step outside the photo and frame: Analyzing drawings depicting New York City in the context of geography education

SLOT3 HIGHER EDUCATION

Chair: *Gergely Horváth*, Department of Environmental and Landscape GeographyInstitute of Geography and Geosciences Eötvös Loránd Univesity, Hungary Discussant: *Péter Bagoly-Simó*, Humboldt-Universität zu Berlin, Germany

Schedule: Wednesday, 2 September, 15:00–16:45

*Michael Solem**, *Richard Boehm*: A research coordination network for geography education

*Giacomo Pettenati**, *Cristiano Giorda*: From geographical education to territorial education. Theories and practices from the laboratories of geography for students of Educational Sciences of the University of Turin

*Marco Bertagni**: Bertagni Geography: a new way of thinking, teaching and applying geography. Paradigmatic case studies of geography based, multi-perspective and multi-disciplinary approaches

*Bertalan Péter Farkas**, *Attila László Főző*: An international community for science education in Europe: Scientix

P17 GEOGRAPHIES OF NATURE – UNDERSTANDING, SENSE MAKING, KNOWLEDGE MAKING

Organizers: *Zoltán Ginelli (Gyimesi)*, Eötvös Loránd University, Department of Social and Economic Geography, Hungary; *Ferenc Jankó*, University of West-Hungary, Hungary

Location: Room H

Session description: Scientific research concerning nature–human relationship is a recurrent theme in the last few decades among many disciplines, producing various critical reflections and heated debates. Geographers have emphasized that our understanding of nature as a resource or as a physical phenomenon is excessively narrow, while environmental studies provide a promising interdisciplinary platform for connecting natural and social scientists. How our natural environment is socially constructed and locally perceived? What are the viable strategies for environmental resilience on different interconnected scales (local, regional, global)? How should we critically understand environmental governance in the reproduction of inequalities? This session invites papers dealing with various connecting questions, including the historically changing social constructions and representations of nature, the cultural and political roles of public attitudes towards the natural environment, the moral challenges of environmental conflicts, security and justice, the changing possibilities for environmental activism and grassroots movements, and the sustainable strategies of local cultures to resilience. Critical studies are also invited focusing on the shifting political economies of environmental governance and policy-making, nature-capital relations and the role of the social production of nature in reproducing social inequalities and underdevelopment, the financialization or commodification of nature (e.g. land grabs) under ecological regimes generating environmental crises, and recent controversies in environmental knowledge production (e.g. climate change).

SLOT1

Chairs: *Zoltán Ginelli (Gyimesi)*, Eötvös Loránd University, Department of Social and Economic Geography, Hungary; *Ferenc Jankó*, University of West-Hungary, Hungary

Schedule: Monday, 31 August, 17:15–19:00

*Stefano Ancilli**: Social sustainability in Rome's natural protected areas: new perspective and methods

*Beth Bee**: (Re)producing power and expertise in Mexico's forests: A critical look at early REDD+ initiatives

*Kathleen Braden**: Environmental Governance of Recreational Hunting in Russia

*Michał Jakiel**: Spatial conflicts in a buffer zone of national park: a case study from Slowinski National Park (Northern Poland).

*Ferenc Jankó**: Debates over nature: the question of environmental change in Hungarian science

*Noémi Ujházy**, *Marianna Biró*: "Nature has gone wild" – perceptions of landscape changes in Hungary

P18 GEOGRAPHY AND SPORT

Organizers: *Alexandru Ilieș*, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT1 University St.410087, Oradea, Romania; *Gábor Kozma*, Department of Social Geography and Regional Development Planning, University of Debrecen, Hungary

Location: Room B

Session description: The aim of this session is to demonstrate the versatile connection between the two branches of geography - physical and social geography - and the sport sector. The organisers welcome presentations, amongst others, under the following thematic areas (of course, presentations not closely related to the below topics are also welcome):

- impact of the physical factors on the sport achievements
- impact of the sports facilities/events on certain elements of the natural environment
- location of the sports facilities within the cities and the changes of the locations
- role of the sports facilities/events in the urban regeneration
- place of the sports in the organisational structure of the local governments
- social-economic-political impacts of the sports facilities/events

SLOT1

Chairs: *Alexandru Ilieș*, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT1 University St.410087, Oradea, Romania; *Gábor Kozma*, Department of Social Geography and Regional Development Planning, University of Debrecen, Hungary

Schedule: Wednesday, 2 September, 15:00–16:45

*Gábor Kozma**: The possibilities for the scientific research into the relationship between settlement and sports

*Emilia Bogacka**: Sports infrastructure in Poznań, Poland

Alexandru Ilieș, *Ștefan Baias*, *Sorin Buhaș*, *Jan Wendt*: The impact of post-socialist period to the Romanian Sport Stadiums according with economic support

*Vincent Gaubert**: The spatial dynamic of five-a-side football in French cities

*Loïc Ravenel Ravenel**, *Roger Besson*, *Rafaelle Poli*: The CIES Football Observatory: how geography helps us to understand football players market

*Alexandru Ilieș**, *Ștefan Baias*, *Ovidiu Gaceu*, *Dorina Camelia Ilieș*, *Ioana Josan*, *Mihaela Ungureanu*, *Mihai Vlaicu*: Padiș – A tourist oasis in the heart of Apuseni Mountains

P19 GEOGRAPHY, EMPIRES, NATIONS AND THE ROLE OF GEOGRAPHICAL SOCIETIES

Organizers: *Róbert Györi*, Eötvös Loránd University Department of Social and Economic Geography, Hungary; *Charles Withers*, Geography, University of Edinburgh, United Kingdom

Location: Room F

Session description: We invite papers from researchers interested in how geographical societies in the past have offered not only their services and expertise, but also their maps and databases in order to further the national and imperial goals of different European states. Of particular interest are papers that explore the various ways in which geographical societies and their members were involved in war efforts, peace preparations, and the production of nationalist and imperialist propaganda.

SLOT1

Chair: *Róbert Györi*, Eötvös Loránd University Department of Social and Economic Geography, Hungary

Schedule: Tuesday, 1 September, 17:15–19:00

*Charles Withers**: Instruments and the practise of geography: the case of the Royal Geographical Society, c.1830-c.1930

*Matteo Proto**: Discovering otherness, empowering the nation: Italian geographical societies and their dual path

*Zoltán Hajdú**: The thousand-year-old Hungarian state borders: borders of a nation, a state or an empire?

*Steven Arthur Earl Jobbitt**: Mapping Hungary's Oriental Other: Hungarian Geographers and the Colonial Project in the Balkans, 1908-1918

*Zoltán Ginelli (Gyimesi)**: The imperial shift of Soviet hegemony and Cold War politics in Hungarian geography: The "Markos school" of economic geography

SLOT2

Chair: *Charles Withers*, Geography, University of Edinburgh, United Kingdom

Schedule: Wednesday, 2 September, 08:30–10:15

*Ute Wardenga**: Geographies of power: the case of the Gesellschaft für Erdkunde zu Berlin

*Róbert Györi**: The Communist leadership of the Hungarian Geographical Society after the Hungarian Soviet Republic, 1919 – sin, penance and absolution

*Mike Heffernan**: "Those Unconscionable Maps of Empire": The American Geographical Society and the Politics of Imperialism, 1916-1945

*Ferenc Gyuris**: Territorial revision at the service of European civilisation: The foreign links of a concept in interwar Hungarian geography

*Christian Vandermotten**, *Henri Nicolai*: The aims of the Belgian geographical societies, from their foundation to the eve of the First World War

P20 GEOGRAPHY OF HIGHER EDUCATION AND THE PRODUCTION OF KNOWLEDGE

Organizers: *Rene Matlovic*, University of Presov, Slovakia; *Piotr Pachura*, Częstochowa University of Technology, Poland

Location: Room D

Session description: Proposed session is dedicated to exchanging the current academic research and practical findings on all aspects of global spatial distribution of higher education sector and the knowledge production centers. The main goal is to explore the fundamental questions in human geography and social-economic studies linked to the role of higher education in local and regional innovativeness and knowledge spillovers. The intention of organizers is also to present strategic changes in geographical distribution of higher education sectors in Europe, the BRIC countries (Brazil, Russia, India and China), USA as well as other parts of the world. We would like to invite the presentations that address the following issues in different empirical and theoretical contexts, for example:

- The changes and challenges for higher education systems in "learning society and economy";
- Geographical configuration / reconfiguration of global Universities networks;
- The role of universities and the knowledge production centers in regional development;
- The place of University in globalizing World;
- The impact of knowledge sectors on urban development.
- Higher education and social and technological innovations.

SLOT1

Chair: *Rene Matlovic*, University of Presov, Slovakia

Schedule: Tuesday, 1 September, 08:30–10:15

*Piotr Pachura**: The space in knowledge production

*Vladimir Ira**, *Marta Garitan*: Creative cities and the higher education institutions in Slovakia

*Jürgen Brünjes**, *Eva Vögtle*: Knowledge network formation for innovative study programmes in higher education

*Lucka Lorber**: University research and development strategy as a mechanism for regional development in Slovenia
*Zsuzsanna M. Császár**, *Roland Hegedűs*, *Károly Teperics*, *Tamás Á. Wusching*: Effects of the Hungarian higher education faculties of health sciences on the settlements – Case study: Pécs-Debrecen

SLOT2

Chair: *Piotr Pachura*, Częstochowa University of Technology, Poland

Schedule: Tuesday, 1 September, 10:45–12:30

*Zoltan Dorogi**: Smart path – co-operation of universities and enterprises

*Alena Prochazkova**: The representation of research institutions and their localization in the context of development of metropolitan areas

*Irene Bianchi**, *Federica Appiotti*, *Francesco Musco*: Capacity building for enhancing disaster management and planning: towards an integrated spatial perspective

*Rene Matlovic**, *Kvetoslava Matlovicova*: The dynamics of the higher education sector in Slovakia

P21

GEOGRAPHY IN ECONOMIC AND TERRITORIAL DEVELOPMENT POLICIES

Organizers: *Márton Péti*, Reserach Institute for National Strategy (NSKI), Eötvös Loránd University (Eötvös Loránd University), Hungary; *Géza Salamin*, The Central Bank of Hungary (MNB), Hungarian Society for Urban Planning (MUT), Hungary; *Markus Egermann*, Leibniz Institute of Ecological Urban and Regional Development, Germany

Location: Room D

Session description: Development funds of European Union (EU) play a significant role in economic and territorial development. Even non-EU member countries deal with EU sources in relation to transnational, cross-border and pre-accession EU funds. EU Cohesion Policy and rural development policy are major donors of those development activities. These EU policies will guide the current EU programming period (from 2014 to 2020) in a reformed manner. The policy reforms can also be detected by substantial changes in their geographical dimensions. At the same time national economic policies are also seeking new approaches to enhance growth and competitiveness. The traditional regional way of thinking of EU is becoming more varied. In relation to the so called place-based approach new regional categories and methodologies are to be favoured as well. Territorial Agenda of EU (TA2020) reflects these new approaches as well. This session is looking for answers for the following questions. What geographical/territorial content/dimension is in the current European development and economic policies and activities? What are the new – possibly extended – roles of geography in this renewed policy context? What role geographers can play in related professional communities when forming policies, programmes, and projects? How the roles of the geographic fields and professionals have changed or shall be changed in the future?

SLOT1

GEOGRAPHY IN DEVELOPMENT PLANNING – EUROPEAN PERSPECTIVES

Chair: *Márton Péti*, Reserach Institute for National Strategy (NSKI), Eötvös Loránd University (Eötvös Loránd University), Hungary

Schedule: Wednesday, 2 September, 08:30–10:15

*Géza Salamin**, *Márton Péti*: Geographic dimension in the practice of planning in relation to cohesion policy and economic policies

*Markus Egermann**: The role of geography and spatial planning in sustainability transitions

*Mátyás Jaschitz**: Key factors for a successful territorial cohesion: cross-border cooperation – How can some EU instruments create a new geography?

*Katalin Lőrincz**, *Agnes Raffay*: Learning a lesson from climate change: Incorporating the impacts of climate change and the means and techniques of mitigation and adaptation into tourism education

SLOT2

GEOGRAPHY IN DEVELOPMENT PLANNING – CASE STUDIES

Chair: *Markus Egermann*, Leibniz Institute of Ecological Urban and Regional Development, Germany

Schedule: Wednesday, 2 September, 10:45–12:30

*Csongor Máthé**: Spatial distribution of logistics hubs and sites in Romania

*Tibor Tiner**: Surviving centres – declining peripheries. Changing economic position of leading companies on NUTS 2 level in Hungary

*László Jeney**, *Pál Juhász*, *Attila Korompai*, *Gusztáv Nemes*, *Ágnes Varga*: Importance of synergies in the development of peripheral regions

*Viktória Csizmadiané Czuppon**, *Edina Sáriné Csajka*, *Tamás Molnár*: The local economic development's effects on tourism - on example of Tamási micro region

P22 GIS-BASED GEOMORPHOLOGICAL MAPPING

Organizers: *Lucian Dragut; Szabolcs Fábán; Edina Józsa*, University of Pécs, Faculty of Sciences, Doctoral School of Earth Sciences, Hungary

Location: Room H

Session description: This session aims at facilitating exchange of ideas amongst scientists interested in geomorphometry, GIS and their specific applications in geomorphology, with an emphasis on geomorphological mapping. Methods of mapping specific landforms are particularly welcomed and participation of young scientists and PhD students is encouraged.

SLOT1

Chair: *Edina Józsa*, University of Pécs, Faculty of Sciences, Doctoral School of Earth Sciences, Hungary Discussant: *Florina Ardelean*, West University of Timisoara, Romania

Schedule: Tuesday, 1 September, 08:30–10:15

*Petra Gostinčar**, *Rok Ciglič*: Large-scale geomorphological mapping: fieldwork vs. GIS – examples from Slovenia

*Maciej Liro**: How does the aerial photo scale and the digitizing scale influence the river bank measurement error in GIS?

*Anita Bernatek**: Spatio-temporal variability of pipes development in a mountainous area under a temperate climate (Polish Bieszczady Mts., Eastern Carpathians)

*Maciej Liro**: Spatio-temporal pattern of bed sediments storage upstream from a large dam reservoir. The case of the gravel-bed Dunajec River and the Czorsztyn Reservoir, Polish Carpathian

*Jelena Ilija Basaric**, *Olgica Bakić*, *Aleksandra Gajic*: Regional differentiation of rural areas for tourism purposes – The case of eastern Serbia

SLOT2

Chair: *Anita Bernatek*, Institute of Geography and Spatial Management, Jagiellonian University, Poland Discussant: *Florina Ardelean*, West University of Timisoara, Romania

Schedule: Tuesday, 1 September, 10:45–12:30

*Edina Józsa**, *Adriana Sărășan*: An automated approach to determine optimal parameters for geomorphons mapping

Balázs Nagy, *Márton Deák**, *László Rupnik*, *István Viczián*: Paleo-hidrography of the Danube and the Roman Brigetio, NW-Hungary

*Indira Yuldasheva**, *Daniel Mueller*: Nighttime light imagery for mapping urban growth in Uzbekistan

*Shahbakhti Rostami**: Applying ArcGIS to correcting the coordinate system's errors of rural maps in Iran

P24 HUMAN-ENVIRONMENT RESEARCHES IN UNIFIED (?) GEOGRAPHY, THEORY AND PRACTICE

Organizers: *Zsolt Bottlik*, Department of Regional Science, Eötvös Loránd University, Hungary; *Tamás Telbisz*, Department of Physical Geography, Eötvös Loránd University, Hungary

Location: Room B

Session description: Climate change discourse draws attention again to the relationship between humans and nature. The widely available huge and diversified information about this issue have a significant impact on public opinion and influence political decision making, therefore the knowledge of the theoretical background of these scientific approaches is very important. Research of human-environment relationships is present in geography from the very beginning; definitely, it had great importance in the process of becoming an academic science in the 19th century and it contributed to the duality of geography and brought anthropogeography (i. e. human geography) to life. After the turn of the millennium a part of the scientific community emphasized the need for unified investigations and coordinated results of subdisciplines instead of accumulating isolated results, because only a holistic approach can help in solving global problems for the future of humankind. Geography still has its place in human-environment research: it can be the scene of unified investigations of physical and human geography. If the claim for joint research is vivid among physical and human geographers, this could lead to a new form of integration within geography.

Which paradigms ruled/rule the human-environment research? What has been the attitude of academic geography to this issue since its existence? What were the characteristics of different national geographies in this topic? What is the attitude of geography to neodeterminism appeared after the millennium? Are physical and human geographers able to perform joint human-environment research? The organisers of this session expect papers in connection with these topics. Both physical and human geographers are welcome!

SLOT1

Chair: *Tamás Telbisz*, Department of Physical Geography, Eötvös Loránd University, Hungary

Schedule: Wednesday, 2 September, 08:30–10:15

*Fatima Eisam Eldeen**, *Tamás Telbisz*, *Balázs Nagy*, *Zoltán Czajlik*, *László Rupnik*: Paleoenvironmental reconstruction along the middle course of Mureș River (Romania) based on geomorphological and aerial archaeological surveys

*Margit Köszegi**, *Zsolt Bottlik*, *László Mari*, *Tamás Telbisz*: Human-environment relations in Hungarian geography in the second half of the 20th century

*László Sütő**, *Balázs Adorján*, *Zoltán Dobány*, *Zoltán Dobány Jr.*, *Rózsa Péter**: Temporal changing in spatial distribution of mining settlements in East Borsod Coal Basin (NE Hungary)
*István Viczián**, *János Balogh*, *Éva Kis*, *József Szeberényi*: Climate change and river history – man on the Danube islands in Hungary

SLOT2

Chair: *Tamás Telbisz*, Department of Physical Geography, Eötvös Loránd University, Hungary

Schedule: Wednesday, 2 September, 10:45–12:30

*Tamás Telbisz**, *Zsolt Bottlik*, *Zoltán Imecs*, *Margit Kőszegi*, *László Mari*, *Alena Petruvalská*: The use of GIS in the Study of Karst and Society Relationships

*Annamaria Uzzoli**: Projected trends in climate-change-related health

*Kitti Dubniczki**, *Mátyás Jaschitz*: Geography of a landscape – Landscape of geography

P25

IDENTITY, ETHNICITY AND SUSTAINABLE DEVELOPMENT IN POST-SOVIET SPACE

Organizers: *David Karácsonyi*, Geographical Institute, Hungarian Academy of Sciences, Hungary; *Tigran Sargsyan*, Yerevan State University, Armenia

Location: Room G

Session description: The Post-Soviet area is a unique area of geographical diversity (natural, social, economic, cultural, political, etc.). Meanwhile, the Post-Soviet countries are in the focus point of different geopolitical vectors and have chosen different priorities of international economic and political integration. Along with Russian-Kazakh-Belarus-Russian integration EU also is a more and more active power in the Post-Soviet area. In the East and in Central Asia China came as a new emerging power. Among the frozen conflicts of Transnistria, Abkhazia, Ossetia and Karabakh there are new potential frozen conflicts in Ukraine. The global economic crisis also changed the trends of economic recovery after the transformation crisis, some of the countries like Belarus and Ukraine faced serious economic problems after 2008. These factors are interconnected; therefore a big variety of sustainable development (SD) challenges is emerging.

This session is aimed:

- To revealing and analysing the variety of socio-economic challenges the Post-Soviet area is facing in the context of SD (economic development and sovereignty, outmigration, health issues, unemployment, etc.), as well as mitigation scenarios,
- To analysing the issues in the context of current ethno-political processes and ethnic diversity in Post-Soviet space,
- To discussing the unsustainable Soviet “heritage” (particularly, environmental) and elaborating possible solutions,
- To discussing the theoretical and practical potential of geography in identifying, resolving and predicting the SD challenges in Post-Soviet area.

Accordingly, the thematic orientation of the session will refer to socio-economic geography (social, economic, population, ethnic, urban, political, cultural), environmental science, regional geography, historical and theoretical geography.

SLOT1

Chair: *David Karácsonyi*, Geographical Institute, Hungarian Academy of Sciences, Hungary

Schedule: Tuesday, 1 September, 10:45–12:30

*Liudmila Fakeyeva**, *Alina Nemkova*: Spatial and structural changes in ethnical structure of Belarusian Polesie

*David Karácsonyi**, *Hanaoka Kazumasa*: Chernobyl and Fukushima – demographic trajectories after nuclear disaster

*Nataliya Stepanivna Koroma**: New territorial identities on the space between Baltic and Black seas

Kadi Mägi, *Maarten van Ham*, *Kadri Leetmaa**, *Tiit Tammaru*: How does the ethnic component of one's residential context change as a result of immobility and short- or long-distance moves: The case of Estonia

SLOT2

Chair: *David Karácsonyi*, Geographical Institute, Hungarian Academy of Sciences, Hungary

Schedule: Tuesday, 1 September, 15:00–16:45

*Osamu Murao**: Traditional Architecture and Landscapes Designed for Disaster Risk Reduction in Japan

*Gustav Novotny**: Czech-Uzbek economic relations in the context of social and environmental risks in Post-Soviet space: child labour, nature and health issues in Uzbekistan

*Tatiana Vorotnikova**: Can multiplicity be a base of identity? Comparative analysis of Russia and Latin America (problem definition)

P30 LANDSLIDE HAZARD

Organizers: *Mihai Alexandru Micu*, Institute of Geography, Romanian Academy, Romania; *Mauro Soldati*, Università di Modena e Reggio Emilia, Italy

Location: Room J

Session description: All throughout Europe, landslides represent geomorphic hazards that have the potential to inflict severe damages to human society and natural environment. The very complex European orographic systems are extremely prone to a wide range of fast or slow-moving landslides, conditioned by its litho-structural traits and physiographic characteristics or by the results of a long-lasting human inhabitation, leaving its fingerprint on the environment. The Pyrenean, Alpine, Apennine, Carpathian or Balkan's mountainous chains, including their intra-mountainous depressions or outer hilly and tableland units, are subjected to a large spectrum of landslides whose morphodynamic patterns are reflecting, besides the complex conditioning framework, the triggering factors mainly in form of precipitation, snowmelt or earthquakes. Representing a dominant source of sediments throughout mountain chains, the landslides may pose a direct geomorphic control not only on fluvial processes, but sometimes may govern almost entirely the mechanisms and rhythms of present-day geomorphic evolution.

Throughout the last 25 years, large regions of Europe have experienced major social and economic changes, among which the fall of the communism, the shift towards a free market economy and the extension of EU towards East. Especially the latter meant also important changes in the land cover and use as well as demographic challenges, imprinting new patterns in assessing exposure and vulnerability. In the mean time, the fastly-increasing technologies (including more accurate and less expensive Earth Observation products) and more elaborated methodologies are giving better insights in the landslide morphodynamics. In the mean time, as already stated by the Hyogo Framework for Action and enhanced within Horizon 2020, there is an increased need for a proper landslide risk management framework in which the interaction results between the numerous stakeholders (from both private and public sectors) involved in risk estimation, assessment, management or governance should be transformed from technological achievements into viable commercial products.

The aim of this session is to outline the role of geographers within local, regional or national methodological approaches suitable for improving existing (or under development) landslide risk reduction strategies. Also, the session's purpose is to emphasize how the geographers may contribute in the optimization of landslide risk management organizational framework, assuming the stakeholders' proper levels of implication in hazard identification, risk analysis, risks prioritization and, as a consequence, the adaptation of authorities' attitude towards pro-active approaches.

SLOT1

Chair: *Mihai Alexandru Micu*, Institute of Geography, Romanian Academy, Romania

Schedule: Wednesday, 2 September, 08:30–10:15

*Francesco Faccini**, *Marco Giardino*, *Riccardo Lazzeri*, *Emanuele Raso*: Hazard assessment and risk management of San Rocco and Mortola landslides (Portofino Natural Park, Italy)

*András Hágén**: Anthropogenic and physic landscape forming on the high loess bank

*Mihai Ciprian Margarin**, *Mihai Niculita*: The influence of the anthropic lakes as a major preparatory factor in landslide distribution in Moldavian Plateau, Romania

SLOT2

Chair: *Mihai Alexandru Micu*, Institute of Geography, Romanian Academy, Romania

Schedule: Wednesday, 2 September, 10:45–12:30

*Popescu Mihaela**, *Alexandru Lucian Onaca*, *Urdea Petru*, *Raul David Șerban*: Conventional geophysical surveys for landslide investigations: case studies from Romania

*István Viczián**, *János Balogh*, *Éva Kis*, *Balázs Füsi*, *Ernö Prácer*, *Tímea Prodán*, *Zoltán Szalai*, *József Szeberényi*: Engineering geomorphologic and geophysical study of the high bluff of the Danube threatened by landslides and collapses at Kulcs and Rácalmás (Hungary)

*Thomas Zieher**, *Clemens Geitner*, *Gertraud Meißl*, *Martin Rutzinger*, *Arie Christoffel Seijmonsbergen*: Geotechnical maps as input data for physically-based modelling of shallow landslide susceptibility

Dan Bălțeanu, *Marta Jurchescu*, *Gheorghe Kucsicsa*, *Dana Micu*, *Mihai Alexandru Micu**, *Ana Popovici*, *Veronica Zumpano*: Landslide hazard assessment in the curvature Carpathians and Subcarpathians of Romania: between necessity and uncertainties

P31 “MEZZOGIORNI” OF EUROPE – OLD AND NEW GROWTH GAPS OF EUROPEAN LESS DEVELOPED REGIONS IN THE YEARS OF ECONOMIC CRISIS

Organizers: *Vittorio Amato*, University of Napoli Federico II, Italy; *Fabio Pollice*, University of Salento, Italy

Location: Room C

Session description: The session aims to analyze the new geographies of the gap in the European Union, through the study of the performance of the most vulnerable economies in the years of economic and financial crisis. The dualistic structure of the Italian economy has always seen the less developed “Mezzogiorno” as opposed to the Center-North. In this perspective we intend “Mezzogiorno” as a synonym of less developed region. The goal of the session would be to explain, through the analysis of a significant number of case studies,

the extent to which accession to the European Union has changed the fortunes of the most disadvantaged areas of the old and new member States, and what were the causes of the successes and failures. In this context, particular attention has to be paid to the aspects of policy at the regional scale, probably the fundamental determinants of success in the context of the financial and economic crisis started in 2007.

SLOT1

Chairs: *Vittorio Amato*, University of Napoli Federico II, Italy; *Fabio Pollice*, University of Salento, Italy

Schedule: Monday, 31 August, 13:00–14:45

*Francesco Adamo**: Economic Depression and Entrepreneurship in different “Mezzogiorni” (or Souths)

*Vittorio Amato**: The Geography of Regional Development and Competitiveness Across Europe. A Framework Analysis

*Teresa Amodio**: Marginal population densities and social indicators. The case of Salerno

*Giuseppe Luca De Luca Picione**, *Lucia Fortini*, *Emanuele Madonia*: Campania: the region where young people work and study to a lesser extent

*Luca De Siena**, *Giuseppe Calignano*: Geography of knowledge and role of clients. Evidences from the ICT sector in South-Eastern Italy

Dániel Kuttor, *Tomasz Kossowski**, *Zsolt Zaborcsák*: Social and spatial effects of current crisis in Visegrád countries: different paths and implications

SLOT2

Chairs: *Vittorio Amato*, University of Napoli Federico II, Italy; *Fabio Pollice*, University of Salento, Italy

Schedule: Monday, 31 August, 15:15–17:00

*Daniela La Foresta**: Is the financial crisis remapping Europe? Some geopolitical reflections

*Fabio Pollice**: The drift of the South of Italy. Recent trends in the “Mezzogiorno” economy

*Mariagiovanna Riitano**: Mediterranean diet and quality productions in Campania

*Luigi Scrofani**: Polarization and urban sprawl in South Italy. The case study of Catania

*Claudia Sunna**: An analysis of the debate on the effectiveness of European cohesion policies: the Italian case

P32 MULTILINGUALISM, ETHNICITY, TERRITORY AND POWER

Organizers: *Laszlo Karoly Maracz*, European Studies, The Netherlands; *Patrik Tátrai*, Geographical Institute, RCAES HAS, Hungary

Location: Room F

Session description: Due to all sorts of globalization processes, like migration, mobility, IT-networks and the empowerment of indigenous and autochthonous language/ethnic communities and minorities we are facing on different levels of governance, i. e. macro-, meso- and micro-levels a proliferation of all sorts of linguistic/ethnic diversity. As a consequence, multilingual and multiethnic areas need to be managed by the different branches of governance. In these inter-ethno-linguistic arrangements power configurations play an important role yielding almost without exception asymmetric language policy regimes in which the languages being spoken in a certain territorial unit are subject to hegemonic ambitions of the language(s) with more power. In this session, authors are invited to elaborate on the analyses of such language policy arrangement in multilingual areas and to visualize the manifestations of language use in virtual and physical spaces. Not only papers investigating the spatial manifestations of linguistic diversity compelled by asymmetric power relations in space or territory are welcomed but also the ones focusing on the role of territory or space itself in enforcing asymmetric and hierarchical relations among languages and ethnic groups in multilingual/multiethnic areas. To maintain the status quo a complex governance system exists in which territory is intertwining with demographic, legal and social-economic politics. The proposers will also invite those papers that focus on the question how in the public or private spaces civil or economic activity can undermine the linguistic manifestation depending on the asymmetric power relations in a formal governance domain.

SLOT1 ETHNIC AND LINGUISTIC DIVERSITY

Chair: *Károly Kocsis*, Geographical Institute, RCAES HAS, Hungary

Schedule: Wednesday, 2 September, 10:45–12:30

*Ádám Németh**: Geography and “diversity studies”

*Károly Kocsis**: Geographic dimensions of multilingual diversity in the Carpathian Basin

*Nesrin El Ayadi**, *Virginie Mamadouh*: Urban linguistic diversity: An exploration of Linguistic Mental Maps of Amsterdam

*Daria Shatilo**: The ethnosocial differentiation of European capitals: London, Paris, Madrid, Berlin and Moscow

*János Péntzes**, *Zoltán István Pásztor*: Spatial distribution of Roma population and the pattern of incomes in Hungary

SLOT2 CHANGING ETHNIC IDENTITIES

Chair: *Károly Kocsis*, Geographical Institute, RCAES HAS, Hungary

Schedule: Wednesday, 2 September, 15:00–16:45

*Patrik Tátrai**: Ethnic identification reconfigured: Theories interpreting ethnic realignment in East Central Europe

*Damir Josipović**: Transgression, appropriation, acculturation: 20 years of Dayton and the war of Letters and Place names in empty spaces

*Timea Trombitas**: School choice and assimilation: the case of scattered ethnic Hungarians in Serbia

*Dániel Balizs**: Ethnic processes and identity in the Western-Pannonian area after 1989

*Farkas György**: Changing identities of minority communities and electoral behaviour. The spatial structure of Hungarian minorities in settlements of Southern Slovakia in the light of the election results.

P33 NEW AND EMERGING ELECTORAL GEOGRAPHIES: METHODS, PATTERNS, MOVEMENTS

Organizers: *Martin Šimon*, Local and Regional Studies, Institute of Sociology, Academy of Sciences of the Czech Republic, Czech Republic; *Balázs Szabó*, Geographical Institute, RCAES HAS, Hungary

Location: Room G

Session description: The party-structure of European countries has changed significantly for the last decades. New cleavages have emerged both in the Western democracies and post-socialist countries. The processes of globalisation, the new waves of immigration, and the economic crisis have had strong effects on the election results in the western part of Europe. The Eastern European party-structure, which originally developed in the early 1990s after the change of regime, has been modified since then due to the new cleavages caused by the EU enlargement and the economic reforms. These changes created a flux of changes in electoral landscape in Europe and thus provides a rich material to be analysed. For the session of electoral geography we kindly invite researchers dealing with: A) analyses of spatial differences in election results in different countries, regions or cities, and participants of comparative studies of different territorial levels; B) analysis of the impact that the new social movements and the rapid development of communication technologies (the new media) make on the election results; C) spatial features of electoral base of new political parties like populist, pirate, Eurosceptic, anti-globalist parties. The aim of the session is to provide a state-of-art report of a new and emerging research in electoral geography and related fields in Europe, therefore papers dealing with multi-country perspective are encouraged to participate.

SLOT1

Chairs: *Martin Šimon*, Local and Regional Studies, Institute of Sociology, Academy of Sciences of the Czech Republic, Czech Republic; *Balázs Szabó*, Geographical Institute, RCAES HAS, Hungary

Schedule: Wednesday, 2 September, 10:45–12:30

*Christian Vandermotten**: A geography of the results of the 2014 European elections

*Balázs Szabó**: Spatial characteristics of the voting bases in Western and Eastern Europe

*Jernej Tiran**: Urban-rural cleavage – an emerging cleavage in Slovenian politics?

*David Sichinava**: The tale of the three cities - elections in the Post-Soviet capital cities

SLOT2

Chairs: *Martin Šimon*, Local and Regional Studies, Institute of Sociology, Academy of Sciences of the Czech Republic, Czech Republic; *Balázs Szabó*, Geographical Institute, RCAES HAS, Hungary

Schedule: Wednesday, 2 September, 15:00–16:45

*György Vida**: Changing electoral system and voting patterns: The geography of the 2010 and 2014 Hungarian parliamentary elections

*Martin Šimon**, *Tomáš Kostecký*, *Renata Mikešová*: Radical right in Czech party system: rise and fall all round

*Andor Végh**, *Áron Léphafi*: Spatial patterns in Vojvodina ethnopolitics

*Marcin Waszak**, *Michał Szczegielniak*: Determinants of support for political parties and alternative movements in 2014 self-government election in Warsaw

P34 NEW ECONOMIC SPACES IN RURAL AREAS

Organizers: *Konrad Czapiewski*, Institute of Geography and Spatial Organization PAS, Poland; *Vladan Hruška*, Jan Evangelista Purkyně University in Usti nad Labem, Czech Republic

Location: Room C

Session description: This session should focus on rural economic industries which are significantly neglected both in the political and scientific discourse due to the prevalence of farming oriented research. Further, (neo)endogenous approaches to rural development stress the valorisation of local resources e.g. by the means of tourism and production of regional products. However, manufacturing firms of non-local owners processing non-local material and products, service-oriented enterprises with larger than local ambitions (e.g. ICT services, consultancy) do not fit in such representations of rural space and development although they offer in some rural localities even more jobs than farming. The purpose of this session is to promote the scientific discussion on the importance of non-agricultural and non-tourism economic industries in rural space. Position of these industries in contemporary rural areas when ICT and transportation technologies significantly contributed to the shrinkage of distance to larger markets will be discussed. Also their share on sustainability of rural localities will be re-evaluated.

SLOT1

Chair: *Konrad Czapiewski*, Institute of Geography and Spatial Organization PAS, Poland

Schedule: Tuesday, 1 September, 08:30–10:15

*Konrad Czapiewski**: Non-agricultural and non-tourism economic industries in rural peripheries of the Visegrad countries

*Vladan Hruška**: Sustainable rural areas: with or without people?

*Thomas Dax**, *Andrew Copus*: The reliance of different types of rural regions on internal and external interrelations

*Birgit Leick**: How firms adapt to demographic decline in rural-peripheral regions – Empirical evidence from East and West Germany

*Mauricette Fournier**: “Mountains workshops”: resilience elements of an endogenous model of sustainable development.

SLOT2

Chair: *Vladan Hruška*, Jan Evangelista Purkyně University in Ústí nad Labem, Czech Republic

Schedule: Tuesday, 1 September, 10:45–12:30

*Vladan Hruška**, *Pavel Doležal*: Post-socialist economic restructuring of rural Czechia: time-space development of number of jobs

*Iwona Kopacz-Wyrwał**, *Wioletta Kamińska*: Level of education vs entrepreneurship in rural areas in Poland

*Denis Cerić**: Overestimating a role of tourism in peripheral rural areas on the example of selected regions in Poland and Croatia

*Fatemeh Yadali Jamaluei**, *Jahanbakhsh Saffari*: Description of supply management in Central District of Najaf Abad city

*Nader Amiri**: The role of cultural products in rural youth migration (Case study: east of Guilan province, Iran)

P35

NO MAN’S LAND OR DEPENDENT PERIPHERIES: UNDERSTANDING ECONOMIC RESTRUCTURING THROUGH LOCAL PRACTICES WITHIN AND OUTSIDE GLOBAL PRODUCTION NETWORKS

Organizers: *Ernő Molnár*, University of Debrecen, Hungary; *Erika Nagy*, Hungarian Academy of Sciences, Hungary; *Daniel Schiller*, Leibniz Universität Hannover, Germany

Location: Room K

Session description: The recent crisis re-shaped the economic landscape of Europe, reinforcing existing socio-spatial inequalities and producing new peripheries (Hudson Hadjimichalis, 2014, Ehrlich et al, 2013). The key agents of spatial transformations drove economic restructuring through production networks that are “globally organised nexus of interconnected functions and operations of firms and non-firm institutions through which, goods and services are produced, distributed and consumed” (Coe et al, 2004). Global production networks (GPNs) are embedded into a complex and multiscalar – intra-, inter-, and extra-firm – net of social relations that are highly imbalanced and increasingly dynamic (Dicken, 2007; Coe, 2011). Understanding the interplay of corporate strategies, changing norms and institutional practices shaping the regulative environment and of local socio-cultural contexts of labour market processes would lead us to a more nuanced, yet a broader view of the variegated and uneven landscape of the world economy – and of the underlying social relations. Based on the concepts that argue for the relational view of economic/spatial restructuring, we propose a discussion over uneven development within and also outside the European economic space focused on local spaces that are considered “backward” or “peripheral” – where local agents lack power to change existing institutional contexts. In particular, we propose to discuss dependencies within global production networks, and the rise of local problems and conflicts related to those in various social contexts/trajectories; the strategies and practices of economic agents in spaces marginalised in global flows/networks; the responses of local agents to the dependent or marginalised status within global networks.

References Coe, N. M., Yeung, H. W., Dicken, P., Henderson, J. 2004: “Globalizing” regional development: a global production networks perspective. *Transactions of the Institute of British Geographers* 1. 29 (4), 468-484. Coe, N. M. 2011: *Geographies of production I: An evolutionary revolution?* *Progress in Human Geography* 35 (1) 81-91. Dicken, P. 2007: *Global shift: Mapping the contours of the world economy*. New York, London: The Guilford Press. Ehrlich, K., Kriszan, A., Lang, T. 2012: *Urban Development in Central and Eastern Europe – Between Peripheralization and Centralization?*, *disP - The Planning Review*, 48, 2, 77–92. Hudson, R., Hadjimichalis, C. 2014: *Contemporary Crisis Across Europe and the Crisis of Regional Development Theories*, *Regional Studies*, 48, 1, 208-218.

SLOT1

Chairs: *Ernő Molnár*, University of Debrecen, Hungary; *Erika Nagy*, Hungarian Academy of Sciences, Hungary Discussant: *Daniel Schiller*, Leibniz Universität Hannover, Germany

Schedule: Tuesday, 1 September, 17:15–19:00

*Christian Vandermotten**: A world-wide comparison of the geographical consequences of the 1929 and present crises

*Jana Szuhová**, *Dagmar Petriková*: Bottom-up activities of local communities in food production in urban areas

*Eduard Montesinos i Ciuró**: Local strategies facing global economic restructuring: the case of a Catalan old industrial city

*Ernő Molnár**: Between two fires: changing role of East Central Europe in the global production networks of labour intensive industries. A case study of the Hungarian footwear sector

P36 OCCUPY! – POWER, RESISTANCE AND COMMEMORATION IN PUBLIC SPACE

Organizers: *Maoz Azaryahu*, University of Haifa, Israel; *Ágnes Eröss*, Geographical Institute RCAES HAS, Hungary

Location: Room F

Session description: Public space is an ever-changing, multi-layered and multi-faceted arena where different opinions, visions, notions are voiced literally and displayed materially (by monuments, statues, street names, street art etc.) thereby contributing to the production of a symbolic landscape. When state and city authorities appropriate public space as symbolic landscape, the manifest visibility of power possible provokes contestations and defiance. Symbolic landscapes are constantly subject to interpretation and reinterpretation. The asymmetry in accessibility to and visibility in public space makes them into possible flashpoints of protest and resistance. Beyond demonstrations, acts of resistance to officially assigned meanings of symbolic landscapes are possibly cast as ephemeral features of the physical landscape in the form of graffiti and counter-monuments. Acts of resistance may also later be commemorated in the local landscape as a result of ideological reorientation of society: Symbolic landscapes are also the story of how power and resistance form and transform public space. The session invites papers discussing topics about production of symbolic landscape, politics of commemoration and processes of spatial appropriation of public space, with special attention to power asymmetry between actors.

SLOT1

Chair: *Kenneth Foote*, University of Connecticut, United States

Schedule: Tuesday, 1 September, 10:45–12:30

*Eri Kitada**: Traveling hero: Globalized toponymies of Nelson Mandela and Martin Luther King Jr.

*Frédéric GIRAUT**: Nelson Mandela : Global or post-colonial Icône ? Evidence from the toponymy

*Kenneth Foote**, *Anett Arvay*: Contested places, contested pasts: Public memory and commemoration in contemporary Hungary

*Maoz Azaryahu**, *Ágnes Eröss**: "In memory of victims": Monument and anti-monument in Freedom Square, Budapest

SLOT2

Chair: *Maoz Azaryahu*, University of Haifa, Israel

Schedule: Tuesday, 1 September, 15:00–16:45

*Guy Jano Tragos**: Claiming Johannesburg: Acts of symbolic appropriation and division

*Lucas De Melo Melgaço**: "Invisible" in Public Space: The Black Bloc Phenomenon in Belgium and Brazil

*Lajos Boros**, *Szabolcs Fabula*, *Dániel Horváth*, *Zoltan Kovacs*: Urban diversity and the production of public space in Budapest

*Carlos Gerardo Mena**: Schizophonic and Tuning – An interdisciplinary study of sound as an identity in the contemporary urban space

*Aron Szentpáli**: The appropriation of public space in downtown Cluj-Napoca/Kolozsvár – measures against a national minority or the construction of a vindictory national collective memory?

P37 PEOPLE, PLACE, POLITICS – CHALLENGES FOR CENTRAL EUROPE AND THE BALKANS

Organizers: *Elena dell'Agnese*, Università di Milano-Bicocca, Italy; *Norbert Pap*, University of Pécs, Hungary

Location: Room E

Session description: Several new states were formed in Central Europe and the Balkans in the last 25 years as results of the national endeavours and geopolitical changes. Content and meaning of citizenship has been changed, European and national, double/multiple identities resulted in the reappraisal of the relationship to the state. Ethnicity and religious background played an important role shaping the national identities. We can also identify nation and state building projects in the region. The geographical, cultural and political landscapes were fragmented by new borders which also influenced the settlement network. The "old", former or phantom boundaries still influence the economy and social policies in the countries of the region. A significant group of the states joined the European Union and NATO. However the enlargement processes have not been finished in the Western Balkans yet. Turkey has returned to the Balkans, inducing hopes and fears in the local societies. The Turkish soft and hard power is emerging in the life of the region. Poland, another emerging regional power in Central-Europe has a strengthen role in Europe as biggest member of the Visegrad group. The states of the wider region look for their place along a West-East axis.

SLOT1 CHALLENGES FOR CENTRAL EUROPE

Chair: *Elena dell'Agnese*, Università di Milano-Bicocca, Italy

Schedule: Monday, 31 August, 15:15–17:00

*Richard Nikischer**: Territorial identity of the inhabitants of Central Europe: a comparative analysis of the Visegrad Four countries

*Jan Hauke**, *Barbara Konecka-Szydłowska*, *Katarzyna Kulczyńska*: Regional differences among the states of the Visegrad Group

*Jakub Taczanowski**, *Arkadiusz Koloś*: How new transport investments influence mobility? Cases of Visegrad countries in the last decade.

*Borys Pavlovich Iatsenko**: Ukraine in the geoeconomic, geopolitical and geocivilization regions of Europe

SLOT2 GEOPOLITICAL CHANGES IN THE BALKANS

Chair: *Norbert Pap*, University of Pécs, Hungary

Schedule: Monday, 31 August, 17:15–19:00

*Péter Reményi**, *Norbert Pap*: Two decades after Dayton

*Fatih YAMAN**, *Zeynep Selin Acar*: The complex political-administrative structure of Bosnia and Herzegovina and evaluation of the Dayton Agreement in this context

*Antonio Giuseppe Violante**: How the Balkans lost their challenge for reconciliation: the case of Višegrad

*Tatjana Vukelic**: Migration of Romani people from Western Balkan to Western European countries

*József György Fekete**: The Turkish foreign policy in practice – what has been achieved in the Balkans?

P38 PERIGLACIAL PROCESSES IN HIGH MOUNTAIN ENVIRONMENTS

Organizers: *Balázs Nagy*, Eötvös Loránd University, Department of Physical Geography, Budapest, Hungary; *Urdea Petru*, West University of Timisoara, Romania

Location: Room J

Session description: Due to the distinguishing characteristics, like high relief and steep slopes, the mountain areas provide much potential energy for geomorphological processes. Because the environmental conditions are very different in space, in function of the slope angle, exposition, lithology, vegetation cover, topoclimatical conditions etc., and very sensitive on the climate change, the mountain systems are characterized by a great morphodynamic variability. In this context, knowing the real interest of several geomorphologists to the specific problems of the high mountain areas, one aim of the proposed session is bringing together these experts and, on this occasion, finding the latest results of the study concerning the morphodynamics of these mountainous areas. On the other hand, is a good occasion to know the latest techniques used in the study of geomorphological processes in mountainous areas, a real opportunity for the establishment of interdisciplinary working groups. The papers will be grouped into a few major themes that:

- GIS and geomorphological processes in the mountain areas;
- Interdisciplinarity in the reconstruction of the paleogeomorphological mountain landscape;
- Periglacial processes;
- Mountain permafrost and climate changes;
- Geomorphological hazards in high mountain areas;
- Fluvial processes and sediment budgets in high alpine catchment.

SLOT1

Chair: *Urdea Petru*, West University of Timisoara, Romania

Schedule: Wednesday, 2 September, 15:00–16:45

*Patrick Chiroiu**, *Ardelean Adrian Cristian*, *Mihai Lupșan*, *Alexandru Lucian Onaca*, *Urdea Petru*, *Mircea Voiculescu*: Tree-ring based reconstruction of major snow avalanches in the central part of the Făgăraș Mountains, Southern Carpathians

*Balázs Nagy**, *József Kovács*, *László Mari*, *Zoltán Szalai*: Ice and water in the World's highest mountain desert, Dry Andes, Ojos del Salado region

*Alexandru Lucian Onaca**, *Florina Ardelean*, *Mircea Ardelean*, *Urdea Petru*: Thermal characteristics and internal structure of earth hummocks from Southern Carpathians

*Raul David Șerban**, *Alexandru Lucian Onaca*, *Urdea Petru*, *Mihaela Popescu*: Environmental controls on size, shape and spatial distribution of alpine block streams

*Mircea Voiculescu**, *Florina Ardelean*, *Patrick Chiroiu*, *Alexandru Lucian Onaca*: Spatio-temporal reconstruction of snow-avalanche activity using dendrogeomorphologic approach in Capra glacial valley - Făgăraș Mountains (Southern Carpathians), Romanian Carpathians

P39 QUALITY OF LIFE: DISCUSSING THE RECENT GEOGRAPHICAL APPROACHES AND RESEARCH

Organizer: *Ivan Andráško*, Masaryk University, Czech Republic

Location: Room B

Session description: During the last decades, the concept of quality of life has become a stable part of the geographical inquiry. Owing to the fact that the concept is quite naturally connected with human life and the environment in which human life takes place, the studies of quality of life are at least implicitly associated with geographical concepts such as space, place, time or landscape. Regarding the studies explicitly dealing with quality of life, a more or less “traditional” approach within geography includes the observation and mapping of spatial and temporal variability of this phenomenon. However, due to the need to explain and understand quality of life and its various aspects thoroughly as well as due to the complex nature of the concept, more (specific) approaches based on different (e.g. methodological) starting points and focused on various goals emerged and developed within the research of quality of life in geography. In this respect, the process of development of the theoretical, methodological or applicatory background can be considered as still ongoing, including components such as innovative tools of data acquisition, processing and visualisation

(e.g. GIS, mixed methods) or focusing on specific areas (e.g. flood areas, suburbs) and contexts (e.g. politics or policy-making, regional planning). The aim of the session is to offer a communication platform providing opportunities to:

- present the results of the research of quality of life, either currently concluded or ongoing,
- discuss the theoretical, methodological and applicatory aspects of the concept of quality of life, or any other additional issues and concerns raised by session participants.

SLOT1

Chair: *Ivan Andráško*, Masaryk University, Czech Republic

Schedule: Tuesday, 1 September, 08:30–10:15

*Yoshiki Wakabayashi**: Effects of contextual and compositional factors on the evaluation of subjective well-being

*Attila Bán**, *Viktor Pál**, *Gyula Nagy**: The role of telemedicine in geographical inequalities of the health system in Hungary

*Jernej Tiran**: Determining intra-urban differences of quality of residential environment: a case study of selected Slovenian cities

*Jana Spilková**: Neighborhood environment and quality of life in Prague's teenagers: a pilot study of built environment's effects on health behavior in a post-communist context

*Anna Mydlova**, *Ladislav Tólmaci*: Analysis of Food Security – case study from Slovakia in Stropkov district

SLOT2

Chair: *Ivan Andráško*, Masaryk University, Czech Republic

Schedule: Tuesday, 1 September, 10:45–12:30

*Kazumasa Hanaoka**: Small-area population microdata estimation for disaster management and mitigation planning

*Kamila Klemesová**: Perception of environmental hazards in the context of quality of life

*Balázs Kiss**: Geographical range of everyday activities in small settlements of Hungary: the quality of life viewpoint

*Jaroslav Biolek**: Whose quality of life? Actor-network-theory research on (non-)human collectives in suburbs

*Dénes Komjáthy**: Development policies in the context of subjective well-being discourses

*Ivan Andráško**: The research of quality of life in geography: on recent approaches and future developments

P40

REGIONAL CLIMATE CHANGE IN EUROPE

Organizers: *Judit Bartholy*, Dept. of Meteorology Eötvös Loránd University, Hungary; *Kornélia Radics*, Hungary

Location: Room I

Session description: The potential global warming will certainly affect the European climate conditions in the coming decades and centuries. Therefore it is essential to provide reliable estimations for different types of end-users (from the field of agriculture, forestry, hydrology, energy use, human health, risk management, and even for the purpose of governmental strategy planning). Potential consequences of the regional climate changes are also important to analyze in details because they might add specific relevant information. In this session any regional climate change projection is particularly welcome using either statistical and/or dynamical methods. Further focuses of the session include extreme event analysis, evaluation of reference climatological data, comparison of different climate projections and/or different methods, analysis of different applications, and various impact studies based on climate projections.

SLOT1

Chairs: *Judit Bartholy*, Dept. of Meteorology Eötvös Loránd University, Hungary; *Kornélia Radics*, Hungary

Schedule: Wednesday, 2 September, 08:30–10:15

Monika Lakatos, *Zita Bihari*, *Tamas Kovacs**, *Sándor Szalai*, *Tamás Szentimrey*: Analyses of temperature and precipitation extreme indices in the Carpathian region in the period 1961–2010

*Adina-Eliza C Croitoru**, *Adrian Piticar*: Analysis of cold extreme and variability indices related to air temperature in the Romanian Carpathians and Intra-Carpathian areas

Joanna Wibig, *Joanna Jędruszkiewicz**: Contemporary changes in precipitation extremes in Poland in comparison to changes in other parts of Baltic Sea Basin

*Jelena Lukovic**, *Branislav Bajat*, *Dragan Blagojević*, *Dejan Filipović*, *Milan Kilibarda*: Spatial pattern of recent rainfall trends in Serbia (1961–2009)

*Judit Bartholy**, *Karolina Andre*, *Ildiko Pieczka*, *Rita Pongrácz*: Regional climate model validation study for European regions

SLOT2

Chairs: *Judit Bartholy*, Dept. of Meteorology Eötvös Loránd University, Hungary; *Kornélia Radics*, Hungary

Schedule: Wednesday, 2 September, 10:45–12:30

Gabriella Szepszo, *Péter Szabó**: Uncertainty assessment based on results of global and regional climate models

Rita Pongrácz, Judit Bartholy, Anna Kis:* Evaluation of estimated changes in precipitation-related extremes using raw vs. bias-corrected regional climate model outputs

Judit Bartholy, Csilla Peline Nemeth, Rita Pongrácz, Kornélia Radics:* Analysis of future wind climatology based on regional climate model projections

János Mika, Lajos Gál, István Kósik, András Rácsi:* Impact of climate on wine quality and quantity in the Matra region

P42 RIVER AND FLOODPLAIN REHABILITATION

Organizer: *Dénes Lóczy*, University of Pécs, Department of Physical and Environmental Geography, Hungary

Location: Room J

Session description: Regulated rivers are mostly so narrowly constrained within flood-control dykes that they are unable to develop their channel freely. Papers are welcome on various alternative (ecological engineering) solutions to restore channels, expand floodplains in order that they better fulfil their environmental functions (floodwater retention and storage, creation of aquatic habitats, water replenishment to oxbows etc.), on the impact of climate change (floods and droughts) on river and floodplain ecosystems, land use changes in floodplains (afforestation, wetland restoration), monitoring and evaluation approaches to restoration projects, the role of rehabilitation projects in water management policy, the involvement of stakeholders in the process of rehabilitation planning.

SLOT1

Chair: *Dénes Lóczy*, University of Pécs, Department of Physical and Environmental Geography, Hungary

Schedule: Tuesday, 1 September, 15:00–16:45

Ján Babej, Karel Brabec, Petr Halas, Zdeněk Máčka:* Interactions between vegetation and fluvial forms in the Central European Rivers

Eva A. Bogdan, Andrew Wilson:* Adapting the Dutch room for the river approach in Alberta, Canada

Éva Kis, Dénes Lóczy, Ferenc Schweitzer, János Balogh, József Szeberényi, István Viczián, Tímea Prodán:* Typology of river banks with erosion hazard on the Lower Tisza River

Paola Giostrella, Francesco Faccini, Lara Fiorentini, Massimo Melillo, Elisabetta Napolitano, Michele Santangelo:* Uncontrolled urbanization and geo-hydrological hazard in the Ligurian catchments: a case study from the Rapallo floodplain

SLOT2

Chair: *Dénes Lóczy*, University of Pécs, Department of Physical and Environmental Geography, Hungary

Schedule: Tuesday, 1 September, 17:15–19:00

Magdalena Latinovic:* Floods in the Balkans

Dénes Lóczy:* Assessment of floodplain rehabilitation on the Drava floodplain

Vittoria Scorpio, Pietro P.C. Aucelli, Anna Loy, Carmen M. Rosskopf:* An integrated geomorphological-ecological approach of channel system characterization: a tool to promote channel recovery and floodplain ecosystems

P43 SOCIAL DIFFERENCE AND THE TRANSFORMATION OF PERIPHERALITIES IN TIME OF CRISIS

Organizers: *Kathrin Hörschelmann*, Leibniz-Institut für Länderkunde Leipzig (IfL), Germany; *Judith Miggelbrink*, Leibniz Institut for Regional Geography, Germany; *Judit Timár*, Centre for Economic and Regional Studies, HAS, Hungary

Location: Room C

Session description: The geographical consequences of economic crisis cannot be understood in isolation from the socio-spatial practices through which space is co-produced as well as transformed in contexts of everyday life. Spatial practices in these contexts are conducted at the intersection of production and social reproduction. They range from the development of socio-economic coping strategies to the “domestication”, transgression and contestation of peripherality, for instance through household economies, care relations, diverse investments into places and regions, gendered mobilities, political actions, representational strategies, and much more. As these practices are difficult to generalise and capture statistically, however, they tend to remain below the radar of structural analysts. Assumptions about the relevance or not of the everyday practices of marginalised social groups further contribute to this, as their actions are too readily constructed as insignificant in the face of seemingly overwhelming structural forces. It is the aim of this conference session to challenge these assumptions and blind spots by developing alternative approaches for researching the relationship between everyday spatial practices, differentiated by unequal relations of gender, class, ethnicity, race, ability and others, and the (re)production as well as transformation of peripherality in times of economic crisis. We are particularly interested in papers that consider:

- how regions, places and populations are becoming (re)configured as peripheral in current discourses of crisis and,
- how processes of socio-spatial peripheralisation are negotiated by social actors whose discourses and practices are frequently marginalised, i. e. because of gender, class, racial, ethnic or other inequalities.

SLOT1

Chair: *Judith Miggelbrink*, Leibniz Institut for Regional Geography, Germany

Schedule: Wednesday, 2 September, 08:30–10:15

*Lara Fiorentini**: New geographical spaces, cities and citizens: public policies and bottom-up strategies for a better quality of life in marginalized suburbs. A case study from Genoa (Italy)

*Ilgvars Jansons**: The potential of exploring household everyday practices for a geographical research of peripheralisation

*Márton Lendvai**: Fluidity of the peripheries: resilience and the rural assemblage

*Aura Moldovan**: Territorial mobility and socio-spatial polarisation in Romania and Hungary

*Judit Molnar Sansum**: Intercultural strategy of the Hungarian Roma

SLOT2

Chair: *Kathrin Hörschelmann*, Leibniz-Institut für Länderkunde Leipzig (IfL), Germany

Schedule: Wednesday, 2 September, 10:45–12:30

*Anna Ortiz**, *Mireia Baylina*, *Maria Prats*: Children, school and everyday life in times of crisis in Catalonia

*Anna Ortiz**, *Maria Rodó-de-Zárate*: Young educated women in front of crisis and precariousness: space, emotions and strategies

*Zsuzsanna Pósfai**: Articulating and resisting the crisis through housing

*Gergely Tagai**: The relationship between social exclusion and economic crisis

*Ibolya Torok**: Social vulnerability assesment using exploratory spatial data analysis. Case study: Mures County

*Gábor Dániel Velkey**: The changing role of the state in the organization of public education (centralisation, decentralisation, recentralisation).

P44

SOIL EROSION AND SOIL CONSERVATION IN THE XXI. CENTURY

Organizer: *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Location: Room J

Session description: Soil erosion and its interactions with other land degradation processes worldwide still pose a significant threat to society. As a response, various soil conservation measures and strategies have been designed and applied. However, their effectiveness and efficiency are poorly documented. A better understanding of the various soil erosion processes operating at various spatial and temporal scales and in different environments, their controlling factors, impacts and suitable conservation measures still remain major challenges.

This session will focus on natural and anthropogenic soil erosion processes, their controlling factors and effects (both on site and off site) on society, and on traditional and innovative soil conservation practices. Despite recent advances, there still remain major knowledge gaps that need to be addressed by the scientific community. This session aims at stimulating discussions to formulate perspectives for future research.

The main topics for presentations at this session are:

- Processes: monitoring soil erosion rates and data collection.
- Factors controlling soil erosion rates.
- Modelling: how to make reliable predictions of soil erosion rates at various spatial scales?
- Impacts: what are on site and off site effects of soil erosion?
- Interactions between soil erosion and other land degradation processes.
- Soil conservation: how effective and efficient are traditional and innovative practices?

SLOT1

Chair: *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Schedule: Tuesday, 1 September, 08:30–10:15

*Gergely Jakab**, *Csaba Centeri*, *Erzsébet Mészáros*, *Boglárka Szabó*, *Judit Szabó*, *Zoltán Szalai*: Soil organic carbon erosion among scales on a loamic Cambisol

*Ádám Kertész**, *Melinda Pálinkás*, *Adrienn Tóth*: Land degradation, soil erosion and ecosystem services

*Balázs Madarász**, *Szabolcs Benke*: Role of grass strips and conservation agriculture in soil erosion control

*Sanja Enes Mustafić**, *Tanja Dobrosavljevic*, *Jelena Lukovic*, *Predrag Manojlovic*, *Marko Milosevic*: Suspended sediment transport in Serbian rivers

SLOT2

Chair: *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Schedule: Tuesday, 1 September, 10:45–12:30

Boglárka Szabó, *Csaba Centeri*, *Gergely Jakab**, *Judit Szabó*, *Zoltán Szalai*: Examination of soil erosion processes and their rates based on data from different land use intensities

*Judit Alexandra Szabó**, *Gergely Jakab*: Extreme soil moisture content and erosion

*Adrienn Tóth**: Laboratory experiment on association of rare earth oxides to different aggregate sizes – preliminary study of a field scale research on sediment redistribution due to erosion

P45 TERRESTRIAL CLIMATE ARCHIVES IN EURASIA

Organizers: *Erzsébet Horváth*, Eötvös Loránd University, Dept. of Physical Geography, Hungary; *Farhad Khormali*, Gorgan University of Agricultural Sciences and Natural Resources, Iran

Location: Room I

Session description: The Pleistocene paleoenvironmental changes are best preserved in the loess-paleosoil sequences. These changes show differences from West to East according to the various climatic and geomorphic conditions. The detailed investigations of loess-paleosoil sequences of different regions can help us to understand the finer fluctuation of the climate and thus the environmental characteristics.

SLOT1

Chair: *Erzsébet Horváth*, Eötvös Loránd University, Dept. of Physical Geography, Hungary

Schedule: Tuesday, 1 September, 15:00–16:45

*György Varga**, *János Kovács*, *Zoltán Szalai*, *Gábor Újvári*: Granulometric properties of aeolian dust deposits in the Carpathian Basin

*Erzsébet Horváth**, *Gabriella Barta*, *Balázs Bradák*, *Ágnes Novothny*: Paleosols of the Hungarian loesses

*Ágnes Novothny**, *Manfred Frechen*, *Erzsébet Horváth*, *Darrell S. Kaufman*, *William D. McCoy*, *Eric A. Oches*, *Christine Thiel*, *Gábor Újvári*: Post-IR IRSR dating of Middle – Late Pleistocene loess sequences from Hungary

*Gabriella Barta**, *Balázs Bradák*, *Manfred Frechen*, *Erzsébet Horváth*, *P. Koeniger*: Stable carbon and oxygen isotope patterns of secondary carbonates and their paleoenvironmental role – case studies from Hungary

SLOT2

Chair: *Tímea Kiss*, University of Szeged, Hungary

Schedule: Tuesday, 1 September, 17:15–19:00

*Tímea Kiss**, *Péter Hernesz*, *György Sipos*: Floodplain levels and paleo-channels: floodplain development along the Lower Tisza River

*Péter Hernesz**, *Tímea Kiss*, *Róbert Vass*: Development of the Bereg Plain (Hungary) based on radiocarbon and OSL data

*Katalin Györgyövcics**, *Orsolya Katona*, *Tímea Kiss*, *György Sipos*: Aeolian forms and movement phases of the sand dune association in Inner Somogy, Hungary

P46 TERRITORIAL DEVELOPMENT IN EUROPE: INNOVATION AND LOCAL GOVERNANCE IN RURAL DEVELOPMENT PROGRAMMES

Organizers: *Marilena Labianca*, Università del Salento, Italy; *Francisco Antonio Navarro*, Universidad de Granada, Spain

Location: Room G

Session description: Territorial development in Europe has been mainly implemented in the European rural through LEADER Initiative, and other rural development programmes with the same approach, for the last twenty years. Bottom-up endogenous development, community empowerment and local innovation have been the main principles of such programmes. But, what are the relations between local innovation and local action groups in the countryside? To what extent do innovations stimulate rural and social change or reinforce established social structures? To what extent do the local empowerment and local innovations help to solve the economic and rural crisis? How does local governance and innovation produce renewed social structures? How does it support established social structures? If the European countryside becomes a place for innovation, to what extent will its image of social backwardness and inferiority to urban life remain? Will development programmes allow rural areas to experiment, as researchers would like to see, without hindrance? Can one make an evaluation, analysis or study of policies, such as LEADER, which focus on the transferability of experiences? Definitely, the main aim of this session will be to clarify the effect of the Development Programmes on Rural Change, how those are contributing to accelerate the rural transformation, on the new characteristics of rural areas in the European Union (EU), and of course, lessons to share.

SLOT1 LEADER IMPLEMENTATION, EVALUATION AND GOVERNANCE. STUDY CASES OF LOCAL ACTION GROUPS AND TERRITORIES IN EASTERN AND SOUTHERN EUROPE

Chair: *Marilena Labianca*, Università del Salento, Italy
Discussants: *Anna Maria Augustyn*, Consultant, vice-president at Groupe de Bruges, Poland; *Thomas Dax*, Federal Institute for Less-Favoured and Mountainous Areas (BAMF), Austria; *Elena Irincu*, Universitatea din Oradea, Romania; *Francisco Antonio Navarro*, Universidad de Granada, Spain; *Jan Prochazka*, Masaryk University, Czech Republic

Schedule: Tuesday, 1 September, 17:15–19:00

*Anna Maria Augustyn**, *Gusztáv Nemes*: Local responses to the EU rural development policy

*Thomas Dax**, *Theresia Oedl-Wieser*: Rural innovation activities as a means for changing development perspectives. An assessment of promoting LEADER initiatives since more than two decades

*Elena Irincu**, *Ciprian Barna*, *Rodica Petrea*, *Luminița Filimon*, *Claudiu Filimon*: LEADER approach as local development tool in Romania. Reflexion from the case of Bihor County

*Marilena Labianca**, *Angelo Belliggiano*, *Stefano De Rubertis*, *Angelo Salento*: The Leader approach in Puglia: critical issues and potentialities starting by empirical evidence

*Jan Prochazka**: Leader approach in The Czech Republic: The added value on regional level in multi-level governance setting

*Francisco Antonio Navarro**, *Eugenio Cejudo*, *Juan Carlos Maroto*: Innovation and rural change in development programmes. The cases of the local action groups of Wales and Andalusia

SLOT2 RURAL TOURISM AND RURAL DEVELOPMENT, AGRICULTURAL LANDSCAPE, TERRITORIAL INEQUALITIES. IMPACTS OF THE COMMON AGRICULTURAL POLICY

Chairs: *Peter Jordan*, Austrian Academy of Sciences, Institute of Urban and Regional Research, Austria; *Zanda Peneze*, University of Latvia, Faculty of Geography and Earth Sciences, Latvia
Discussants: *Nicola Galluzzo*, Italy; *Csilla Nezei*, University of Pécs, Faculty of Sciences, Doctoral School of Earth Sciences, Hungary; *Antonina Plutino*, Università di Salerno, Italy

Schedule: Wednesday, 2 September, 08:30–10:15

*Antonina Plutino**: The local development plan GAL "The paths of the good life"

*Peter Jordan**, *Xenia Kinga Havadi Nagy*, *Zoltan Marosi*: Tourism as a driving force in rural development? Results of a comparison of case studies in Romania and Austria

*Csilla Nezei**: The spatial characteristics of herbs in Lake Balaton Recreational Area

*Zanda Peneze**, *Imants Krūze*, *Olģerts Nikodemus*: The Influence of EU Payments on Land Use in Upland Mosaic-Type Landscape of Latvia

*Nicola Galluzzo**: Analysis of financial subsidies allocated by the Common Agricultural Policy in the European farms in order to reduce territorial inequalities

P47 TERRITORIAL IMBALANCES, GEOPOLITICAL TRANSFORMATIONS AND MACROECONOMIC ENLARGEMENT PROCESSES IN THE CHANGING SCENARIO OF EU

Organizers: *Giacomo Cavuta*, Università G. d'Annunzio Pescara, Italy; *Dante Di Matteo*, "G. d'Annunzio" University, Italy

Location: Room E

Session description: In recent years have been produced profound transformations in the international economic order as a result of a clear trend towards interdependence of a supranational scale economic systems and a more pronounced polarization of the development and growth problems in conflict between North and South, East and West of the world. In particular, it is well evident the existence of strong disparities within the Community. It seems obvious that, in a system of close connections and political and economic correlations, a non-homogeneity and uniformity is a problem to solve. In order to combat the differences between the regions, the Community has moved in many directions with the help of different instruments. The most important financial instrument of EU regional policy has certainly been the European Regional Development Fund, with the introduction of two additional funds for the economically disadvantaged regions: the European Social Fund and the FEOG-Oriented (intended to encourage the improvement of facilities and agriculture sectors of EU). In order to use the Structural Funds as effectively and efficiently as possible, it was decided to divide the poorest regions in subcategories to be able to highlight their peculiarities. In this way it was possible a more direct approach to the issues of the various regions.

In the light of the upcoming processes of eastward enlargement of the EU, we propose a session aimed to deepen the discussion on the subject of geopolitics, trying to understand how will change the assets of a wider Europe, paying particular attention to: geographical changes due to the geopolitical transformation; benefits and territorial disadvantages due to enlargement; economic and social reflections caused by structural changes in economic policy.

SLOT1

Chair: *Giacomo Cavuta*, Università G. d'Annunzio Pescara, Italy
Discussant: *Dante Di Matteo*, "G. d'Annunzio" University, Italy

Schedule: Wednesday, 2 September, 15:00–16:45

*Gianfranco Battisti**: The enlargement of the eu as a local case of globalisation: a theoretical approach

Marcello Bernardo, *Francesco De Pascale**, *Alessandro Ruffolo*: The case of Matera, Basilicata, Southern Italy: a model of reuse, sustainability and resilience for Europe

*Simona Epasto**: Europe's Banking Union as a crucial moment of structural change in economic policy

*Andrea Gozzi**: Opportunities and threats due to EU enlargement

*Michele Pigliucci**: Ukrainian crisis between territorial dynamics and strategies of energetic supply

*Dante Di Matteo**, *Giacomo Cavuta*: New territorial structure of the eu: what advantages and disadvantages?

P48 THE CHANGING GEOGRAPHIES OF THE EUROPEAN CITY COMPETITION UNDER THE CONTEMPORARY GLOBALIZATION

Organizers: *Michael Hoyler*, Department of Geography, Loughborough University, United Kingdom; *László Jeney*, Department of Economic Geography and Futures Studies, Corvinus University of Budapest, Hungary

Location: Room L

Session description: The globalizing world provides European cities with a different kind of possibility for development. A huge number of publications underline that the process of globalization has re-arranged the city competition (Castells, Hall, Taylor), of which real winners can integrate more successfully in the international urban hierarchy. Recently more international attention has been given to the most crucial urban success factors. Some cities have a more advantageous position in the intensified city competition by European integration and globalization processes. Competitiveness of cities is connected to a shift in their sectoral structure. As manufacturing abandons cities, classic explanations of urban advantages are based mainly on elimination of transport costs should be further developed. Approaches and methods of new economic geography appreciate the effect of agglomeration economics. Due to their agglomeration advantages, a more developed infrastructure, relative good situation communication networks and more skilled manpower, cities are preferred by multinational companies locating their headquarters to the optimal place. Thus, the key city-specific features could be measured empirically with knowledge-based indicators (e.g. accessibility of excellent informational infrastructure) supplemented with the level of productivity, the quality of human capital. It comes up as a fundamental question how the contemporary globalization is able to re-arrange the European city competition.

SLOT1

Chair: *László Jeney*, Department of Economic Geography and Futures Studies, Corvinus University of Budapest, Hungary

Schedule: Tuesday, 1 September, 17:15–19:00

*Maria Stella Chiaruttini**: Exchange industry in turmoil: financial globalisation and the new map of financial centres in Europe

*György Csomós**: Cities as command and control centres of the global economy: an empirical industry-specific analysis

*Gábor Dudás**: Air transport shaping space: Mapping the cost distance and time distance of Budapest using air traffic data

*Fatih Kara**, *Arif Keceli*: Effects of Rapid Urbanization on Land Cover Change: In the case of Istanbul

*Evert J. Meijers**, *Martijn Burger*, *Marloes Hoogerbrugge*: Linked - the economics of city networks: polycentricity, integration and performance

*Zoltán Nagy**, *Géza Tóth*: The effect of the biggest companies on spatial structure in the East-Central Europe

P49 THE FUTURE OF CITIES BETWEEN COMPETITIVENESS AND VULNERABILITY: THE SMART CITY PERSPECTIVE

Organizers: *Flavia Marzano*, Stati Generali dell'Innovazione, Italy; *Luigi Mundula*, University of Cagliari - Department of economic and business sciences, Italy

Location: Room L

Session description: With half of the world's current population living in cities, the urbanisation process is still present in all countries. At the beginning of the 20th century, cities with 8 or 10 million inhabitants were unimaginable, as well as unmanageable. Sociologists and urban planners believed that the growth of cities should be limited and alternative solutions should be offered. These hypotheses, however, have been overridden by reality as city populations continue to increase. More recently, some scholars, such as Sassen (2004), emphasise the phenomena of the irreversibility of a city's growth and of the centrality of cities being the engine of development. Nonetheless, there are certain critical aspects regarding cities. First, they consume approximately 80% of the energy produced in a country. Second, they represent the place where the impacts of the climate change and of the natural disaster are stronger. Third, they are the primary source of pollution. For all of these reasons, making cities more liveable, more efficient and more resilient is rapidly becoming the most important, and no-longer postponable, objective of policy makers.

On the basis of this assumption in recent years, the concept of a “smart city” has been developed. This new planning paradigm is linked to the concept of innovation, social inclusion, efficient and sustainable use of the (economic, social and environmental) resources as targets for which to aim.

Starting from this framework the aim of the session is to explore the concept of smart city focusing on the following sub-topics: defining, representing, building, living, producing, governing, financing the smart city.

Special guest of the session will be Linda Laura Sabbadini Director of the Department of social and environmental statistics - ISTAT (Italian National Institute of Statistics).

SLOT1 SMART CITY: DEFINITIONS AND MEASUREMENT

Chairs: *Flavia Marzano*, Stati Generali dell'Innovazione, Italy; *Luigi Mundula*, University of Cagliari - Department of economic and business sciences, Italy Discussant: *Christian Smigiel*, Erfurt University of Applied Sciences, Germany

Schedule: Monday, 31 August, 17:15–19:00

*Linda Laura Sabbadini**: Smart ways to well-being

Sabrina Auci, *Luigi Mundula**, *Donatella Vignani*: Defining Smart Cities: a dynamic approach

*Alessandra Ferrara**, *Maria Cozzolino*: Monitoring smart communities: a holistic approach

*Romano Fistola**: Smart city: the sunset of the urban planning?

*Franca Miani**: Smart City: simply a “branding strategy” for adding value?

*Nadia Mignolli**, *Alessandra Fasano*, *Roberta De Santis*, *Anna Villa*: Dealing with smartness at local level: experiments and lessons learned

SLOT2 SMART ENVIRONMENT AND TOURISM

Chairs: *Flavia Marzano*, Stati Generali dell'Innovazione, Italy; *Luigi Mundula*, University of Cagliari - Department of economic and business sciences, Italy Discussant: *Dolores Sánchez-Aguilera*, Universitat de Barcelona, Spain

Schedule: Tuesday, 1 September, 08:30–10:15

*Rosa Anna La Rocca**: Urban tourism as an accelerator of urban smartness?

Andrea Salustri, *Luigi Mundula**: The “smart” side of landscape: the linkages between tourism and welfare policies

*Ladislav Tolmáček**, *Mydlová Anna*, *Cákoci Rastislav*: Evaluation of image and attractivity of towns – Slovak case study

*Frida N Guiza-Valverde**: Urbanscapes of disaster. The local in vulnerable communities enduring in a mid-sized city in Mexico

*Maria Siti**, *Efthimios Bakogiannis*, *Avgi Vassi*: Supporting the shift towards smart city realities in the Greek environment

SLOT3 SMART TOOLS AND CITIZENS INVOLVEMENT

Chairs: *Flavia Marzano*, Stati Generali dell'Innovazione, Italy; *Luigi Mundula*, University of Cagliari - Department of economic and business sciences, Italy Discussant: *Franca Miani*, University of Parma, Italy

Schedule: Tuesday, 1 September, 10:45–12:30

*Zita Bognár**, *Péter Gyenizse*: A GIS method in settlement geography

Michele Angelaccio, *Alessandra Basili**, *Berta Buttarazzi*: Improving Smart Land Project cooperation: a coworking matrix model for online web based geoSmartCities Applications

*Mateusz Ilba**: Analysis of location the solar panels, the key to increasing renewable energy in the city

*Alessandro Prunesti**: Encouraging new patterns of urban experience through the interconnection between mobile application, online services and the internet of things

*Dolores Sánchez-Aguilera**, *Jaume Font-Garolera*, *Petros Petsimeris*: Barcelona Smart City: The Gap between municipal policies and public perception

SLOT4 SMART CITY FUTURE CHALLENGE AND PERSPECTIVES

Chairs: *Flavia Marzano*, Stati Generali dell'Innovazione, Italy; *Luigi Mundula*, University of Cagliari - Department of economic and business sciences, Italy Discussant: *Frida N Guiza-Valverde*, Universidad Nacional Autónoma de México, México

Schedule: Tuesday, 1 September, 15:00–16:45

*Flavia Marzano**, *Luigi Mundula*: Inclusion as a key condition for smartness

*Daniele Mezzapelle**: Smartness as a way of life: toward a new urban order?

*Stefano Ancilli**: Why Rome is not (and will never be?) a smart city

*Christian Smigiel**: The city of the future? Smart cities from a different perspective: Deconstructing the current boom of smart city activities in Italy

*Yvonne Franz**: Living labs for creating smart urban futures

P50 THE (IR)RELEVANCE OF B/ORDERING: BORDER (RE)ENFORCEMENT AND BORDER DISPUTES IN THE EUROPEAN UNION

Organizer: *Béla Filep*, Department of Geography, University of Bern, Switzerland

Location: Room E

Session description: This session focuses on the (re)enforcement of borders as well as on current border disputes within the European Union, a seemingly “borderless” area. Papers can deal with issues ranging from current and new border regimes in the EU, policies and initiatives challenging the principle of free movement of people in the EU, to border disputes and/or negotiations between EU member states or the challenging of current state borders by separatist movements.

SLOT1

Discussant: *Péter Balogh*, Institute for Regional Studies, CERS-HAS, Hungary

Schedule: Monday, 31 August, 13:00–14:45

*Jaume Castan Pinos**: Separatism and the borderless Europe myth

*Antonio Giraldez Lopez**: The law shapes the territory. Spatial consequences of a topological change on the notion of Border from a political and legislative point of view

*Andras Nyeste**, *Roland Heszl*: Measuring the immeasurable – A new approach for the analysis of cross-border cooperation and the notion of 'debordering'

*Alessandro Vitale**: Myths of territory and external borders in the EU's contemporary idea and Europe in the Middle Ages

P51 THE ROLE OF PLACE NAMES IN GEOGRAPHICAL EDUCATION

Organizers: *Peter Jordan*, Austrian Academy of Sciences, Institute of Urban and Regional Research, Austria; *Cosimo Palagiano*, Sapienza Università di Roma, Italy

Location: Room D

Session description: Apart from the trivial fact that without place names we would not be able to communicate our space-related knowledge verbally, place names offer a variety of opportunities for geographical education, but prompt also some important decisions. Among the opportunities are: (1) Descriptive (e.g. Newport, Rocky Mountains) as well as commemorative (e.g. Bolivia, Ho-Chi-Minh City) place names give reason to speak about the characteristics of a place. (2) Place names have usually a long tradition and reflect history and diachronic cultural stratification of a place. They are keys to cultural and settlement history. (3) Since naming motives vary with cultural characteristics and economic orientations of human communities, place names are condensed narratives about human communities. (4) Place names always belong to a certain language and give in this way reason to talk about the cultural and linguistic structure of a place, about minority situations etc. (5) Place names are often in the focus of political conflict indicating at the symbolic level conflicts deeper rooted in society. They are starting points for the discussion of these roots. (6) Place-names changes are driven by changes of political power or of political mainstream in a given society. They prompt the discussion of these political changes. Important decisions to be taken, when it comes to use place names in education, are a. o. the choice between endonyms (= names used by the local community) and exonyms (= names used from the outside) as well as between transliteration and transcription systems in converting names from other scripts.

SLOT1 PLACE NAMES IN THE CONTEXT OF GEOGRAPHICAL EDUCATION

Chairs: *Peter Jordan*, Austrian Academy of Sciences, Institute of Urban and Regional Research, Austria; *Cosimo Palagiano*, Sapienza Università di Roma, Italy

Schedule: Monday, 31 August, 13:00–14:45

*Hein Raghoobar**: Spatial perspective in geographical education

*Cosimo Palagiano**: The geographical names in the primary and secondary schools

*Peter Jordan**: The Importance of Using Exonyms. On the use of exonyms in school atlases and other educational media

*Peter Edmund Raper**: The role of place names in geographical education in Southern Africa

*Ivana Crljenko**, *Ružica Vuk*: Toponyms in Croatian geographical education

*Joan Tort Donada**: Urban toponymy as a tool for geographical education. Barcelona as a case study

SLOT2 OTHER ASPECTS OF PLACE NAMES

Chairs: *Peter Jordan*, Austrian Academy of Sciences, Institute of Urban and Regional Research, Austria; *Cosimo Palagiano*, Sapienza Università di Roma, Italy

Schedule: Monday, 31 August, 15:15–17:00

*Botolv Helleland**: Street names and other names as part of the linguistic landscape:

*Wojciech Włoskiewicz**: Claim Choronyms as a Toponymic Tool of Propaganda

*Peter Kang**: Auspiciousness as Banality: the (re) naming of railway, metro stations and urban streets in post-Cold War Taipei

*Zane Cekula**: Problems attached to the place names selection and standardization in preparing the thematic map of Latvia

*Isaeva Ekaterina**: Représentation de la peur par les toponymes du Québec

*Federica Frondizi**, *Laura Cassi*, *Bruno Foggi*, *Luca Ongaro*, *M. Adele Signorini*: Place-names and forest vegetation in Tuscany (Italy).

P52 TOURISM, GLOBALIZATION AND CULTURE

Organizers: *Carolyn Funck*, Hiroshima University, Japan; *Dieter K Müller*, Umeå University, Sweden

Location: Room B

Session description: Culture and heritage have often been identified as important motivations for tourist travel. However, not least globalization and an increasing mobility have changed long-time for granted taken local and regional cultural patterns. Sometimes it has been argued that globalization has not only implied a co-presence of various cultural expressions in one place and thus a homogenization of culture, but also, somewhat paradoxically maybe, a rejuvenated interest in local culture and tradition. Nevertheless globalization entails competition between places and regions, and in this context culture and heritage have been used as markers signifying the unique and competitive advantages of place. This has among other things implied an interest to commodify culture and heritage into products not least targeting tourists in order to contribute to economic growth and development. Against this background the session aims at analyzing changing tourism geographies in relation to culture and heritage. Hence, the session invites papers addressing this nexus theoretically and empirically in different geographical settings in Europe and elsewhere. Examples for topics to be discussed are as follows:

- Globalization and heritage tourism
- Tourism, festivals and events
- Tourism and identity issues
- Indigenous people and tourism
- Commodification of culture
- Tourists and tourist motivations
- Economic impacts of cultural tourism
- Heritage and cultural attractions
- Dark tourism
- ...

SLOT1

Chairs: *Carolin Funck*, Hiroshima University, Japan; *Dieter K Müller*, Umeå University, Sweden

Schedule: Monday, 31 August, 13:00–14:45

*Raffaella Afferni**, *Carla Ferrario*: Cultural tourism along Saint Martin of Tours Route. The case of Pavia.

*Denis Cerić**: Decentralization of tourism within the chosen capitals of Central Europe – a comparative analysis

*Lujza Tünde Cozma**, *Csongor Máthé*: Transport Accessibility of Northern Transylvania – A Tourism Perspective

*Giuseppe Di Felice**, *Diana Ciliberti*, *Monica Meini*: The sustainable attractivity of landscapes. Tools for self-representation and shared tourism development in rural areas

*Carolin Funck**: The role of volunteers in the management of tourism spaces and experience: examples from Germany and Japan

*Chrysafina Geronta**: Unfolding visitors' multiple perceptions of the tourism landscape of Lindos (Rhodes, Greece)

SLOT2

Chairs: *Carolin Funck*, Hiroshima University, Japan; *Dieter K Müller*, Umeå University, Sweden

Schedule: Monday, 31 August, 15:15–17:00

*Xenia Kinga Havadi Nagy**, *Ilovan Oana-Ramona*: Role of built heritage, local identity, and tourism for sustainable development in Romania. Empirical research results of a Romanian-Austrian project

*Anna Irimiás**, *Gábor Michalkó*: Invisible tourists - hidden destinations. The path of the Great War in the Alpine region.

*Márta Juszti**: The multifunctional role of culture in the development of a disadvantaged village - Case study of Bódvalenke Fresco Village

*Ildikó Kovács**, *Zita Martynin*: Thematic tourist routes in the tourism offer of Hungary

*Justyna Liro**, *Elżbieta Bilska-Wodecka*, *Izabela Soljan*: Tourist movement of the three largest international pilgrimage centres of Poland. Temporal and spatial changes of sacred spaces.

*Dieter K Müller**: Sami tourism at the crossroad: Globalization as challenge for business, environment and culture in Swedish Sapmi

SLOT3

Chairs: *Carolin Funck*, Hiroshima University, Japan; *Dieter K Müller*, Umeå University, Sweden

Schedule: Monday, 31 August, 17:15–19:00

*Solene Prince**: Tourism in the Global Countryside: A Relational Approach to Rural Tourism

*Jiří Vágner**, *Dana Fialová*, *Tereza Kůsová*: Suburban areas in the southern hinterland of Prague – transformation of second home function

*Tamara Rátz**, *Gábor Michalkó*: Educational Travel within the Framework of Invisible Tourism – A Geographical Analysis

*Dolores Sánchez-Aguilera**, *Jaume Font-Garolera*: The risks of success: mass tourism in Barcelona

*Jiří Vágner**, *Dana Fialová*, *Veronika Dumbrovská*: Royal Route in Prague – still genuine tourism?

*Claudia Yubero Bernabé**, *María García-Hernández*: The Cultural Heritage-based model for tourism development in Albarracín (Teruel, Spain).

P53

TRAJECTORIES AND POLICIES – CHANGING NEIGHBORHOODS IN THE CENTRAL AND EASTERN EUROPEAN CITIES

Organizers: *Johanna Holvandus*, University of Tartu, Department of Geography, Estonia; *Kadri Leetmaa*, University of Tartu, Estonia

Location: Room L

Session description: Within last 25 years the cities in the former socialist block in the Central and Eastern European countries have experienced enormous shifts in social stratification followed by visible changes in urban space. In this session we ask how these changes have shaped different types of metropolitan neighborhoods, e.g. gentrification districts in former run-down inner cities, large housing estates as prestigious residential districts in the socialist years, older pre-war detached housing areas, new residential areas in suburbs, and others. The contributions could shed light on the following topics: Has the residential mobility created new homogeneous places or rather mixed

previous and new residents? How diverse the neighborhoods today are when former and new urban layers are combined? How the neighborhood prestige has changed in the cities within this period? Which neighborhoods have upgraded and which have downgraded their status? How the waves of economic decline during the first years of transition, pre-crisis economic growth, global economic crisis and after-crisis stabilisation have influenced the trajectories of neighborhoods? To what extent and how urban policies (or non-policies) have intervened the trajectories of neighborhoods? Who are the influential actors in shaping the neighborhood trajectories (e.g. private-led urban renewal projects, large public investments, grassroots initiatives, neighborhood associations).

We accept a wide range of research methods. The aim of the session is to understand the neighborhood change in the CEE countries within last decades and the factors that shape these trajectories.

SLOT1

Chair: *Kadri Leetmaa*, University of Tartu, Estonia Discussant: *Ludek Sykora*, Charles University in Prague, Czech Republic

Schedule: Wednesday, 2 September, 10:45–12:30

*Eszter Berényi B.**, *Zoltan Kovacs*: Upward trajectories in Hungarian cities in the context of gentrification

*Szabolcs Fabula**, *Lajos Boros*, *Dániel Horváth*, *Zoltan Kovacs*: Residential mobility processes in a diversified urban area of Budapest, Hungary

*Johanna Holvandus**, *Kadri Leetmaa*: The Views of Neighbourhood Associations on Collaborative Spatial Planning in Tallinn

*Gábor Tolnai**: How many ways of changing brownfield to residential neighborhood exist? – Examples from the capital of Hungary

*Jovana Todoric**: Is there Reurbanization in Belgrade? - Evidence and Implications -

SLOT2

Chair: *Johanna Holvandus*, University of Tartu, Department of Geography, Estonia Discussant: *Lajos Boros*, University of Szeged, Hungary

Schedule: Wednesday, 2 September, 15:00–16:45

*Gábor László Vádrus**, *Péter Bajmócy**: Rurality of the different suburban settlement types in the Rural-Urban Fringe of Győr, Hungary

*János Balázs Kocsis**: Suburbanization and urban sprawl from a micro-perspective

*Ludek Sykora**, *Tomáš Brabec*, *Klára Fiedlerová*, *Roman Matousek*: Segregation, ethnic enclave or multicultural neighbourhood? Spatial patterns and daily interaction in post-socialist city

*Vera Efremova**: Spatial development and planning in Russian declining cities

P54

CREATIVE AND INNOVATIVE SOLUTIONS FOR THE DEVELOPMENT OF URBAN AND RURAL AREAS

Organizer: *Tamás Egedy*, Geographical Institute, RCAES HAS, Hungary

Location: Room G

Session description: The growing importance of cities and metropolitan regions in the economic development of countries has been widely acknowledged, so they appear in the international arena more and more as engines of economic competitiveness. Most recently, these urban regions tend to show a strong economic restructuring towards creative economy and innovation. As a consequence of recent restructuring processes, research regarding creativity, knowledge and innovation came to the fore in the European context as well. Papers dealing with geographical and urban aspects, current trends and future perspectives of the European creativity, innovation and knowledge are welcome in this session. The main aim of the session is to trace economic and spatial trends taking place in the development of creative and knowledge intensive industries across Europe.

SLOT1

IMPACTS OF CREATIVITY AND INNOVATION ON THE URBAN ECONOMY

Chair: *Tamás Egedy*, Geographical Institute, RCAES HAS, Hungary

Schedule: Monday, 31 August, 17:15–19:00

*Tomasz Kossowski**, *Jan Hauke*, *Katarzyna Kopczewska*: Index of spatial agglomeration – a new theoretical approach

*Michał Męczyński**: Factors determining participation of women in the labour market of the creative sector: the case of the Poznań Metropolitan Region

*Tamás Egedy**: An emerging creative hub vs commercial gentrification? - the case of the Jewish quarter in Budapest

*Justyna Liro**, *Elżbieta Biłska-Wodecka*, *Izabela Sołjan*: Sanctuaries in Krakow-Łagiewniki (Poland) - new cultural and religious center

SLOT2

CREATIVE AND INNOVATIVE SOLUTIONS FOR URBAN AND RURAL CHALLENGES

Chair: *Tamás Egedy*, Geographical Institute, RCAES HAS, Hungary

Schedule: Tuesday, 1 September, 08:30–10:15

*Albert Santasusagna Riu**, *Joan Tort Donada*: Half a century of urban regeneration in Lleida riverfront (Segre basin, Catalonia, Spain). Changes in land use and local planning

*Yuri Perfetti**: Relocation as a form of resilience. Case study on the relocation of a small settlement after a landslide event in southern Italy.
*Maria Luisa Ronconi**: Les nouvelles formes de la soutenabilité: ré-planifier le paysage rural au risque de désertification

P55 UBIQUITOUS CARTOGRAPHY – THE CROWDSOURCED GEOGRAPHIC INFORMATION USED IN “GISCIENCE”

Organizers: *Zsombor Nemerkenyi*, Geographical Institute RCAES, Hungarian Academy of Sciences, Hungary; *José Jesús Reyes Nunez*, Eötvös Loránd University, Hungary

Location: Room H

Session description: The developments of information technologies that took place over the past few years have changed all of our lives. The modern cartography has become essential for everyday people. Nobody can miss the knowledge about the spatial relations to understand the development of the economical, environmental, or social changes. The most recent technologies enable all of us to read the spatial information from the mobile devices meantime this technology aim a new innovative solution for data sourcing. And this open wide the doors to all kind of georeferenced data acquisition for cartographers and geoscientists. From now all the citizen can serve as a sensor in the world of “volunteered geography”. Beside the most recent applications (e.g. augmented reality) the crowdsourced geographic information in some cases could use in the researches related to the history of cartography. As the volunteered geographic information (VGI) provide data on varying level of accuracy and reliability thus their adoption for scientific purpose require special attention and analysis.

In this session we focus on the following theme:

- the new method of collecting geospatial information;
- the automatically generated maps based on the above mentioned sources;
- reliability of the VGI geodata (authoritative spatial data);
- employing the crowdsourcing activists in the different field of “gisciences”;
- open sources information for basic maps.

SLOT1

Chair: *László Zentai*, Eötvös Loránd University, Department of Cartography and Geoinformatics, Hungary Discussant: *Zsombor Nemerkenyi*, Geographical Institute RCAES, HAS, Hungary

Schedule: Monday, 31 August, 13:00–14:45

*Francesco De Pascale**, *Marcello Bernardo*, *Francesco Muto*, *Alessandro Ruffolo*: Memorial sites and risk geoethical education in Calabria (Southern Italy) through an Open Source GIS project

*Shabbakhti Rostami**: Applying GIS to create a half-century rural data package: experiences from Kermanshah province, Iran

*László Zentai**, *Andrea Pödör*, *András Révész*: Crowdsourced noise map for Hungarian small towns

*Márton Deák**, *Kristóf Kelemen*, *Tibor Standovár*: Forest homogeneity assessment using multi-data segmentation techniques

SLOT2

Chair: *László Zentai*, Eötvös Loránd University, Department of Cartography and Geoinformatics, Hungary Discussant: *Zsombor Nemerkenyi*, Geographical Institute RCAES, HAS, Hungary

Schedule: Monday, 31 August, 15:15–17:00

Timothy Tambassi, *Raffaella Afferni**, *Maurizio Lana*: A Geo-Ontology for Digital Humanities: the experience of Geolat project

*Bálint Kádár**, *Mátyás Gede*: Understanding the urban space usage of first-time visitors, returning tourists and locals through geotagged photography

José Jesús Reyes Nunez, *Barbara Juhász*, *László Zentai**: Testing the use of cartograms in Hungarian schools

*Akos Jakobi**: Online social networks as data sources for geospatial analysis

P56 UNEVEN GEOGRAPHIES OF EDUCATION AND LEARNING IN A CHANGING EUROPE

Organizers: *Ferenc Gyuris*, Eötvös Loránd University, Hungary; *Holger Jahnke*, Europa-University Flensburg, Germany

Location: Room H

Session description: Geographies of education and learning have attracted a lot of attention in geographical research in the past years. This can be partially explained by the fundamental transformations in the governance of national education systems throughout Europe, e.g. for demographic reasons, and a distinct process of neoliberalisation, that slowly introduces market mechanisms of competition and entrepreneurship to schools and other educational institutions. These processes of restructuring might eventually lead to increasing social segregation and spatial polarisation between educational institutions on the one hand, and their surrounding communities on the other. In this perspective the session invites contributions relating to processes of spatial reorganisation within national education systems at different scales. We especially invite presentations concerning the following issues:

- Educational restructuring and school closures in rural and remote areas due to demographic change, including new forms of school organisation;

- Spatial effects of new market mechanisms within public school systems;
- Processes of decentralisation as part of the new educational governance and their outcomes;
- Redefinition of the relation of schools to their respective environments and communities (“educational landscapes”);
- Geographically uneven challenges of education systems within Europe;
- Viable alternatives to neoliberal education regimes on European, national, and local scales.

SLOT1

Chair: *Ferenc Gyuris*, Eötvös Loránd University, Hungary

Schedule: Wednesday, 2 September, 15:00–16:45

*Holger Jahnke, Ferenc Gyuris**: Uneven geographies of education: opportunities for a comprehensive research design

*Artur Bajerski**: Geography of school closures in Poland

*Anika Duveneck**: Reproduction of social inequality in landscapes of education

*Nora Nafaa**: The neoliberal American city and its school market

P58

URBAN POLITICAL ECONOMIES OF EASTERN EUROPE FROM A GLOBAL PERSPECTIVE

Organizers: *Marton Czirfusz*, HAS Centre for Economic and Regional Studies, Hungary; *Zoltán Ginelli (Gyimesi)*, Eötvös Loránd University, Department of Social and Economic Geography, Hungary; *Zsuzsanna Pósfai*, HAS Centre for Economic and Regional Studies, Hungary

Location: Room L

Session description: Despite convergences between urban geographies of neoliberal capitalism, global urban change is highly uneven, developing along divergent paths. This session proposes to analyse recent Eastern European urban trends, including growing social inequalities within and between cities, a critical understanding of processes of decision-making and urban diversity management, and policy networks of inter-city competition and branding in a political economic approach. The venue of the EUGEO conference in post-socialist Budapest offers us a good opportunity to reflect upon the previous decades of neoliberal capitalism in Eastern European urban development within global processes and planetary urbanization (Brenner and Schmid 2012). We also propose to look at how critical urban studies can offer theoretical and methodological tools to understand and challenge urban power relations.

We invite both conceptual and empirical papers addressing – but not limited to – the following questions:

- How might a comparative and historical understanding of global urbanism help us decipher and eventually counteract current political economies in Eastern European cities?
- To what extent can the notions of urban neoliberalism, urban entrepreneurialism and urban growth coalitions be applied to Eastern European cities?
- What are the emerging spatial manifestations of uneven power relations and social struggles in Eastern European cities from a global perspective?
- What are the roles of trans-scalar governmentality (Majoor and Salet 2008) and supra-national institutions (such as the EU) in Eastern European regimes of accumulation?
- What is the role of critical urban studies at the intersections of policy-making, academia and activism in different geographical contexts?

SLOT1

Chairs: *Marton Czirfusz*, HAS Centre for Economic and Regional Studies, Hungary; *Zoltán Ginelli (Gyimesi)*, Eötvös Loránd University, Department of Social and Economic Geography, Hungary; *Zsuzsanna Pósfai*, HAS Centre for Economic and Regional Studies, Hungary

Schedule: Monday, 31 August, 13:00–14:45

Marton Czirfusz, Csaba Jelinek*: Urban entrepreneurialism of Budapest district 8 from a global perspective

*Roman Matousek**: New paths and geographies of public housing in Czechia: in search of explanations

*Branislav Machala**: Towards postpolitical waterfronts in postsocialist Central and Eastern Europe (?): A critical perspective on interplay between capital, institutions and politics in postsocialist Bratislava

*Daniel Šitera**: Europeanization as urban entrepreneurialism: South Moravian Region and the political economy of European Structural Funds

SLOT2

Chairs: *Marton Czirfusz*, HAS Centre for Economic and Regional Studies, Hungary; *Zoltán Ginelli (Gyimesi)*, Eötvös Loránd University, Department of Social and Economic Geography, Hungary; *Zsuzsanna Pósfai*, HAS Centre for Economic and Regional Studies, Hungary

Schedule: Monday, 31 August, 15:15–17:00

*Norbert Petrovici**: Personal Development and the Flexible Contracts: Depoliticized Class Struggles between Highly Skilled Workers and Manual Workers in Cluj

Ludek Sykora, Ondrej Mulicek*: Duality of residential deconcentration and job centralization in postsocialist urban regions: neoliberal capitalism and sustainable development

*Márton Berki**: The role of growth coalitions and actor-networks in the functional transformation of former industrial areas: a comparative analysis from post-socialist Budapest

P59 WHERE PEOPLE SHOP: DYNAMICS IN METROPOLITAN RETAIL LANDSCAPES IN EUROPE

Organizer: *Herman Kok*, Multi, The Netherlands

Location: Room H

Session description: Over the last decades, retail has been a very dynamic sector. Chain organization, consolidation, changing location priorities and store formats, and internationalization to mention some factors triggering dynamics on the supply side. Together with for instance changes in demographics, economic development, consumer behaviour, lifestyle, and mobility patterns, it is obvious that there are many drivers for change. Furthermore, a good number of countries went through a political and economic transformation in the post-World War II period. For instance, these counts for Spain and Portugal as of the mid 1970s, and most countries in Central Europe and Eastern Europe as of 1989 which concluded or is ideally to conclude in the integration of these countries into the economic system centred on the European Union. At the same time, real estate patterns, existing urban structures and urban planning mechanisms tend to have a stabilizing influence on retail landscape dynamics. Looking to individual metropolitan areas, new retail formats such as shopping centres, hypermarkets, and retail parks appeared whereas other locations became obsolete. This happened in a context which was very different from each other in terms of urban heritage and strength of players in the retail market, whereas there is a great variation in the way politics and urban planners reacted on these dynamics and how they tried to influence or steer the geographical and urban impact of these dynamics. The aim of this session is to explore retail landscape dynamics in European metropolitan areas in markets which underwent a political and economic transition followed by a stronger integration in the West European economic system on similarities and differences.

SLOT1

Chair: *Herman Kok*, Multi, The Netherlands Discussant: *Eduard Francois Nozeman*, Faculty of Spatial Sciences, Department of Economic Geography, The Netherlands

Schedule: Wednesday, 2 September, 10:45–12:30

*Benjamin Wayens**, *Adeline De Vleeschauwer*: Europe, a single market for international ready to wear retailers. Really?

*Jeferson Hugo Pacheco de Rezende**, *Heloísa Gomes*: Antwerp: a pocket-sized Metropolis where the spaces of the diamond's and fashion goods trades stimulated the rising of new landscapes of urban's consumption

*Eduard Francois Nozeman**: Occupancy costs in retailing; an international comparison

*András Kovács**, *Tamás T. Sikos*: Effects of Sunday closure on Hungarian shopping behavior

*Herman Kok**: Changing retail landscapes in the context of liberalization and globalization: the case of Warsaw and Ankara

*Dorota Celinska-Janowicz**: Spatial structure and distribution determinants of Warsaw shopping centres

P60 WHOSE RIGHT TO THE CITY?

Organizers: *Lucas De Melo Melgaço*, Vrije Universiteit Brussel, Belgium; *Antonin Margier*, University of Lille 1, France

Location: Room F

Session description: At a time when people are reclaiming access to public spaces (the Occupy Movement, for example), we see that the presence of all citizens in public spaces is not taken for granted. Various authors have focused on the emergent punitive regulation of public spaces that affects the homeless (Smith, 1996; Mitchell, 1997), street vendors (Crossa, 2009), prostitutes (Hubbard, 2004) and youth (Malone, 2002). Moreover, the idea of being a citizen has made way for that of being a consumer, as pointed out by Santos (1987). In order to explain and contest the disputed place of low-income people and minorities in public spaces, Lefebvre's concept "right to the city" (1968) has been used, abused, and acquired different meanings in the literature and in everyday discussions (Souza, 2010). It has become a slogan for politicians and is considered as a positive virtue in urbanism. But when residents of a neighbourhood reclaim their "right to the city", it can be in conflict with the right of the homeless to stay in those public spaces. Making the city more democratic and equal for everyone can result in the exclusion of different groups. The implementation of the "right to the city" can lead to conflicts, and reveals that, depending on the groups, there are different visions of what is the "right to the city".

We welcome submissions that apply or discuss the validity of the concept of the right to the city and we particularly encourage papers on, yet not limited to, the following themes:

- Social movements and protests;
- Privatization and private uses of public spaces (including privatization of security);
- The use of public spaces by youth;
- Homelessness and other social and ethnic minorities;
- Mobility (for example the conflicts between pedestrians, cyclists and drivers);
- Informal uses of public spaces (street vendors, artists, musicians, graffiti makers);
- Prostitution and sex-workers;
- Gender and conflicts in public space;
- Segregation and gentrification;
- Policing and surveillance of public spaces;
- Consumerism and the right to the city;

References: Crossa, Veronica. 2009. « Resisting the entrepreneurial city: Street vendor's struggle in Mexico city's historic center », *International journal of urban and regional research*, Vol 33, No 1, pp. 43-63 Hubbard, Phil. 2004. « Cleansing the Metropolis: Sex Work and the Politics of Zero Tolerance », *Urban Studies*, Vol 41, No 9. Lefebvre, Henri. 1968. *Le Droit à la ville*, Paris: Anthropos. Malone, Karen, « Street life: youth, culture and competing uses of public space », *Environment and urbanization*, Vol 14, No 2, 2002, pp. 157-168. Mitchell, Don. 1997. « The Annihilation of Space by Law: The Roots and implications of Anti-homeless laws in the United States », *Antipode* vol 29, no 3, p. 303-335. Santos, M. 1987. *O Espaço do Cidadão*. São Paulo: Nobel. Smith, Neil. 1996. *The New Urban Frontier: Gentrification and the Revanchist City*, Routledge. Souza, Marcelo Lopes de. 2010. Which right to which city? In defence of political-strategic clarity. *Interface: a journal for and about social movements*, 2 (1): 315 – 333

SLOT1 WHOSE RIGHT TO THE CITY? (1)

Chair: *Antonin Margier*, University of Lille 1, France

Schedule: Monday, 31 August, 13:00–14:45

*Robyn Adele Lincoln**, *Adrienne Gregory*: Lost in Space: Young People, Bus Networks and Rights to the City

*Grégory Busquet**: The “Right to Memory” in the City

*Wojciech Kęblowski**: Towards a genuinely critical urban transport theory, policy and practice: mobilising Henri Lefebvre's right to the city

*Gaby Khazalová**: The conceptualization of justice in urban space: The case of public transport in Brno

*Francesca Pilo**: Interrogating the “right to the (electric) city” in Rio de Janeiro favelas through socio-technical systems

SLOT2 WHOSE RIGHT TO THE CITY? (2)

Chair: *Lucas De Melo Melgaço*, Vrije Universiteit Brussel, Belgium

Schedule: Monday, 31 August, 15:15–17:00

*Annamaria Colombo**, *Giada De Coulon*, *Caroline Reynaud*: Beggars in Geneva: no right to the city?

*Antonin Margier**: From the urban conflict to the denial of the right to the city

*Bart van Leeuwen**: To the Edge of the Urban Landscape: Homelessness and the Politics of Care

*Sarah Tickle**: Young people in coastal resorts: The regulation and criminalisation of “youthful” behaviour in public space.

SLOT3 WHOSE RIGHT TO THE CITY? (3)

Chair: *Antonin Margier*, University of Lille 1, France

Schedule: Monday, 31 August, 17:15–19:00

*Graham Thomas Coggin**: The rights-based implications of the privatisation of public space in cities of the South

*Félix Lefebvre**: Reclaiming the city from Ouagadougou's displaced residents

*Amandine Spire**, *Karine Ginisty**: Right to the city in authoritarian context: urban practices and order

*Helin Karaman**: Standardization of a public park in Istanbul

SLOT4 WHOSE RIGHT TO THE CITY? (4)

Chair: *Lucas De Melo Melgaço*, Vrije Universiteit Brussel, Belgium

Schedule: Tuesday, 1 September, 08:30–10:15

*Sirpa Tani**, *Noora Pyry*: Blurring the boundaries between public and private space: the case of the Restaurant Day

Krisztina Keresztely, *James W Scott**, *Tünde Virág*: Bordering and rights to the city: the case of a multiethnic neighborhood in Budapest

*Jambor Viktor**, *Katalin Vedrédi*: On the edge of the new public places – city center rehabilitation and marginalisation in the downtown of Kaposvár, Hungary

*Federica Burini**: Whose right to public spaces in the city? Recovering spatial capital by the use of collaborative mapping

P61 PRINCES, NATIONS AND TERRITORIES: MAPS AS EXPRESSION OF POWER

Organizers: *Edoardo Boria*, Sapienza - University of Rome, Italy; *Alessandro Ricci*, Italy

Location: Room D

Session description: Interested fields of research:

- Critical cartography
- Historical cartography
- Maps and national identities
- Mapping political geography
- Radical cartography
- Counter mapping
- History of geography

The session is focused on the dialogue between power politics – both in the past and in contemporary times – and the geographical representation, as visual expression of them.

There is a lively scientific debate about these topics in the geographical literature, so we want to give countenance to the ones who are now writing and making research on the binomial maps-power.

SLOT1

Chair: *Alessandro Ricci*, Italy

Schedule: Monday, 31 August, 17:15–19:00

*Michele Castelnovi**: Falsifiability of cartography: Martini and Nieuwhof (1655-1665).

*Cristina Giudice**: Contemporary Art as a Visual Expression of Power

*Matteo Proto**, *Alessandro Ricci*: Etschregulierung: reclamation, river embankment and the construction of modernity in Austrian South Tirol

*Tadeusz Siwek**, *Zuzana Hartmannová*: Mental maps of the World of the children in Ladakh – first results

*Aron Szentpáli**: The representation of Transylvanian ethnic distribution on maps – different ways of reading and inevitable sources of conflict?

*Patrik Tátrai**, *Ágnes Erőss*: Cartographic silence in contested geographical spaces: the case of Cyprus and East Central Europe

P62

FROM GLOBAL NETWORKS TO LOCAL MARKETS – THE CHANGING GEOGRAPHIES OF CONSUMPTION

Organizers: *Eva Fekete Gadoczine*, University of Miskolc, Hungary; *Erika Nagy*, HAS, Hungary

Location: Room I

Session description: Geographical studies focused on major trends in socio-economic restructuring considered consumption as a driver of changes, either i) by identifying it as a mechanism that legitimate and reproduce the social relations of capitalism by objectifying the system of exchange; or ii) by taking it as a “creative action” through which, consumers develop identities and become active agents of economic processes (Goss, 2006). Recently, consumption and retail studies grew more open both to political economic (i) and to “culturalist” (ii) approaches, researching consumption through spatially embedded practices that reflect the cultural logic of contemporary capitalism, as well as the socio-cultural contexts in which they emerge (Pratt, 2004; Wrigley, Lowe, 2002).

The aim of the session is to contribute to the above discourses by revealing various consumption practices and understanding their drivers, such as the (highly uneven) spatial organisation of distribution networks and consumption spaces, the changing role of the state, and the increasing consciousness of consumers related to social and environmental sustainability. In particular, we seek to understand, how the recent crisis of capitalism changed consumption practices and underlying organisational structures and ideologies, moreover, how such transformations manifested as spatial processes – e.g. in the reorganisation of consumption spaces, in changing urban-rural relationships, the marginalization of spaces/consumer groups, and the changing relations of places and goods (branding/commodification). Consumption of local products and its relationship to localization processes and potential role in local development get special attention in order to understand the global changes.

SLOT1

Chairs: *Eva Fekete Gadoczine*, University of Miskolc, Hungary; *Erika Nagy*, HAS, Hungary

Schedule: Wednesday, 2 September, 15:00–16:45

*Melissa Espaillet Bencosme**: “Spices of Spaces”. From Global to Local through consumption

*Eva Fekete Gadoczine**: How do social innovations of local food system reshape rural spaces?

*Gabor Nagy**: Where to live? - Changing geography of housing market in the period of crisis

*Erika Nagy**: The rise of the regulatory state and production of uneven consumption landscapes in East and Central Europe

P64

AGEING AND CHALLENGES OF DEPOPULATION

Organizer: *Zaiga Krisjane*, University of Latvia, Latvia

Location: Room B

Session description: Over the past decades many areas have faced depopulation. Peripheral and sparsely populated rural areas have been most disadvantaged. Demographic structure has been affected by out-migration and increasing ageing population. For many shrinking regions these circumstances will be a challenge in finding ways for further development.

SLOT1

Chair: *Zaiga Krisjane*, University of Latvia, Latvia

Schedule: Tuesday, 1 September, 17:15–19:00

*Izabela Daria Bal**: Creating space without borders? Shaping territorial awareness of people in cross border regions – Case of the Polish-German cross border region

*Branislav S Djurdjev**, *Daniela Arsenovic*, *Bojan Djercan*: Retirement villages: A chance for a village renewal

*Dan Kašpar**, *Klára Hulíková*, *Pavel Zimmermann*: Possibilities of Study of the Mortality Convergence and Divergence among

Selected Countries: Case-Study of the Post-Communist Countries' Approach to the Rest of the European Countries

*Zaiga Krisjane**, *Elīna Apsīte-Beriņa*, *Maris Berzins*, *Ineta Grīne*: Diversification of migration patterns in peripheries of rural Latvia

Organizer: *Alexander Sergunin*, St. Petersburg State University, Russia

Location: Room M

Session description: This panel aims at a comparative analysis of subnational actors' strategies to cope with challenges of globalization and regionalization. Various types of subnational and substate players – regions, cities/municipalities, organizations - are in the focus of these multidisciplinary studies, as well as their connectivity and networking. The diverse problematique, which is ranged from the border management systems on the Norwegian-Russian boundary and international city-twinning projects to urban development strategies in Europe and Russia, is discussed. It is noted that subnational actors aim at building not only survival/short-term but also sustainable development/forward-looking strategies anchored to multilevel connectivity. The rise of non-traditional actors, such as subnational and substate units, brings new quality to world politics and urges traditional actors (first of all states) to take into account new players and seek for new forms of interaction with them. All panelists try to find out whether their cases contribute to the de-borderization, de-sovereignization, decentralization, network-building and cooperative processes in a globalized world or remain loyal to the statist, hierarchical and divisive/exclusive-type approaches to politics and social communication.

SLOT1

Chair: *Alexander Sergunin*, St. Petersburg State University, Russia

Schedule: Monday, 31 August, 15:15–17:00

*Alexander Sergunin**: The Norwegian-Russian border management system in the context of the 2010 agreement on the facilitation of the visa regime for the border residents

*Valery Konyshev**: Norwegian-Russian maritime border management in the context of the 2010 agreement on the delimitation of the Barent Sea

*Elena Batunova**, *Giovanni Perucca*: Urban shrinkage in a shrinking country: Russian Southern regions between 1995 and 2012.

*Maria Gunko**: The transformation of Central Russia's small towns' economical base and rural-urban connections

SLOT2

Chair: *Federica Burini*, University of Bergamo, Italy

Schedule: Monday, 31 August, 17:15–19:00

*Veronique Misseri**, *Thierry Gidel*, *Michael Vicente*: University of Technology in medium size cities to Foster Innovation: The case of the University of Technology of Compiègne ecosystem

*Jaume Feliu**, *Mita Castañer*, *Joan Vicente*: Regional integration and transport infrastructures in Catalonia. The role of Girona as medium-sized city

THEMATIC PANELS

T01 ECRITURES DU RURAL / RURAL WRITING

Organizers: *Mauricette Fournier*, Université Blaise Pascal, France; *Marina Marengo*, Università degli Studi di Siena, Italy

Location: Room H

Session description: Si, corollaire de l'urbanisation, nombre d'artistes (écrivains, peintres. . .) se sont dès le XIX^e siècle emparés de la ville comme objet et scène de leur réflexion sur un monde en construction, il n'en a pas été tout à fait de même pour les espaces ruraux. Force est de constater avec Pierre Bergounioux que, sauf exception, jusqu'à une période relativement récente les représentations des campagnes ont été forgées par les écrits d'une classe dominante (aristocratie, puis bourgeoisie) ; ainsi les conditions de production expliquent-elles largement l'appropriation symbolique des espaces ruraux par diverses idéologies, notamment celle portée par la littérature régionaliste, importante en France (Henry Pourrat, Jean Giono, filmographie de Marcel Pagnol), mais également bien représentée dans d'autres pays (par exemple José María de Pereda en Espagne, ou Patrice Lacombe au Canada, ou Verga et Federigo Tozzi pour l'Italie). Depuis quelques décennies toutefois, à côté des romans du terroir qui s'inscrivent dans la lignée du courant rustique initié au XIX^e siècle et qui rencontrent de vrais succès populaires au vu de l'importance des tirages, émergent un peu partout dans le monde des productions plus exigeantes. Ces écritures qu'alimentent souvent le sentiment de la perte et de la fin d'un certain mode de vie agricole (pour la France on peut citer *Miette* de Pierre Bergounioux, *Les derniers Indiens* de Marie-Hélène Lafon, *Pays perdu* de Pierre Jourde ...) explorent aussi les recompositions contemporaines, peu médiatisées, des espaces ruraux (par exemple les albums *Rural* et *Les ignorants* d'Étienne Davodeau ou la trilogie *Profil paysans* de Raymond Depardon) et redéfinissent de nouvelles « régionalités » (terme moins militant et surtout moins connoté dans son lien passéiste au terroir). Dans cette session nous nous proposons de revisiter le rural et ses représentations à partir des écritures contemporaines (depuis les années 1980), qu'elles s'apparentent à la culture populaire ou à la sphère légitime, afin de dessiner un panorama mondial des campagnes actuelles. Par « écritures » nous entendons la littérature, sous toutes ses formes (romans, autobiographies, bandes dessinées, littérature jeunesse ...) mais aussi les productions audio-visuelles (fictions cinématographiques, documentaires, séries télévisées...).

If corollary of urbanization, many artists (writers, painters.. .) seized in the nineteenth century the city as object and scene of their reflection on a world under construction, it has not been the same for rural areas. It is clear that, unless exceptions, until relatively recently the countryside's representations have been shaped by the writings of a ruling class (aristocracy and bourgeoisie); then the production conditions explain largely the symbolic appropriation of rural areas by various ideologies, including the regionalist literature, important in France (Henry Pourrat, Jean Giono, Marcel Pagnol filmography), but also well represented in other countries (e.g. José María de Pereda in Spain, or Patrice Lacombe in Canada, or Verga and Federigo Tozzi pour l'Italie). Recent decades, however, beside the « country novels » that follow in line with the rustic current initiated in the nineteenth century and meet real popular success given the importance of printings, emerge productions more demanding. These writings often fed by a sense of loss and the end of a certain agricultural lifestyle (for France we can mention *Miette* by Pierre Bergounioux, *Les Derniers Indiens* by Marie-Hélène Lafon, *Pays Perdu* by Pierre Jourde.. .) are also exploring the contemporary reconstructions of rural areas, little publicized (e.g. the graphic novels *Rural* and *Les Ignorants* by Etienne Davodeau or the documentary-film *Profil Paysans* by Raymond Depardon) and redefine a new «régionalité» (term as less militant and certainly less connoted in its nostalgic link to the land). In this session we propose to revisit the rural areas and their representations in the contemporary writings (since the 1980s), in the popular and legitimate cultures in order to draw a global landscape of current countrysides. By «writings» we mean literature in all its forms (novels, autobiographies, comics, children's literature...) but also audio-visual productions (fiction films, documentaries, TV series...).

SLOT1 REPRÉSENTATIONS DU RURAL EN FRANCE ET AU CANADA / RURAL REPRESENTATIONS IN FRANCE AND CANADA

Chair: *Alessandra Bonazzi*, Università di Bologna, Italy

Schedule: Tuesday, 1 September, 15:00–16:45

*Marina Marengo**, *Marengo Marina*: Du roman de terroir au roman de la terre: contradictions et complémentarités entre littérature populaire et littérature «haute» dans la France contemporaine

*Annie Jouan-Westlund**: Pierre Jourde's «Pays perdu»: Elegy or Betrayal?

*Pascal Marie**: Le rural mis à mal dans deux romans du terroir québécois et leurs adaptations cinématographiques – *Séraphin* et *Le Survenant*

*Pierre-Mathieu Le Bel**, *Aurore Mirloup*: Le pays rural raconté. Approche croisée France-Québec à travers les œuvres littéraires: « Gaspard des montagnes à livre ouvert » et *Fred Pellerin* à Saint-Elie de Caxton en Mauricie.

*Isaeva Ekaterina**: Utilisation de la périphrase dans la nomination secondaire des noms de lieux du Québec

SLOT2 LE RURAL DANS LE POLICIER, LE CINÉMA, LA TÉLÉVISION / RURAL AREAS IN THE DETECTIVE NOVELS, FILMS, TELEVISION

Chair: *Annie Jouan-Westlund*, Cleveland State University, United States

Schedule: Tuesday, 1 September, 17:15–19:00

*Alessandra Bonazzi**: The staging of the Montalbano landscape

*Franck Chignier-Riboulon**: The outer Hebrides in crime novels of Peter May

*Mauricette Fournier**: La place de la ruralité islandaise dans les romans policiers d'Arnaldur Indridason et Arni Thorarinsson
*Oksana Bykva Dognon**: Aesthetics, representation and communication of rural in Russian mafia cinema. (1988-2010)
*Rosa Català Marticella**: Quelques représentations du Monde rural catalan sur la télévision

T03 GEOGRAPHY IN ACTION – SPATIAL PLANNING AS A WAY OF DISCOURSE ON BORDERS

Organizers: *Mátyás Jaschitz*, CESCO, Hungary; *Gyula Ocskay*, CESCO, Hungary

Location: Room D

Session description: How can geography be used for breaking down boundaries? In this session – from theory to practice – we would like to highlight the importance of geography as a science regarding to the European border opening territorial processes and policies. This panel will elaborate the topic of cross-border issues from four main aspects:

- Specialities in cross-border data sources and data management. (How can proper databases be built from different national statistical systems to analyse cross-border territorial processes?)
- Specialities in borderlands research. (How can territorial potential be measured by the methods of geography?)
- Specialities in cross-border planning methodologies. (How geography can contribute to spatial planning and preparing of integrated cross-border strategic plans?)
- Taking geography into cross-border practice. (How can geography be developed and utilised for concrete cross-border research projects?)

Since the 17th century the idea of sovereignty in Europe has gradually become inseparable from the ideology of nation state. The new narrative of national identity has been creating subsequently its representing forms from the national currency and national parliament to the official language. The more transparently it appears in the phenomenon of state borders. Thus, all the initiatives aiming to erase the borders between the nation states provoke and injure this idea of sovereignty protected instinctively and deliberately at the same time by the nations. Based on the theories of Michel Foucault, Henri Lefebvre, Alexis de Tocqueville, Lord John Acton, Charles Taylor and Henk van Houtum in our session we make an argument on that state borders are discursive facts thus their status can be changed through the change of the relevant discourse. We would like to reveal how the geography of borderlands can be formed by a borderless territorial observation, a cohesion-focused spatial planning and research methodology.

SLOT1

Chair: *Gyula Ocskay*, CESCO, Hungary
 Discussants: *Jerzy Banski*, Institute of Geography and Spatial Organization, Polish Academy of Sciences, Poland; *James W Scott*, University of Eastern Finland, Finland

Schedule: Wednesday, 2 September, 15:00–16:45

*James W Scott**: Borders and constructivist regional geographies: Cross-border cooperation addressing challenges to alternative cohesion policies

*Mátyás Jaschitz**: Spatial planning as a way of discourse on borders – Territorial observation

*Jerzy Banski**: The influence of the border on the local development on the example of Lublin border region (Poland)

*Ralf P. Meyer**: Spatial information across borders – Practical experiences in the Euregio Meuse-Rhine

*Éva Gangl**, *Enikő Nyerges*: Relation of reality and planning in borderlands – A case study on cross-border health care

T06 SUSTAINABILITY AND CONSUMPTION

Organizer: *Peter Simonyi*, Department of Social and Economic Geography Eötvös Loránd University, Hungary

Location: Room M

Session description: Sustainability one of the most important question of nowadays. What to do, how to do to for practice of sustainable development? The different aspect of consumption of resources, e.g. energy consumption, food consumption, water consumption, are research area not only on global level but down to local level, too. The spatial questions, social-economic aspects, holistic approach are interesting fields to discuss.

SLOT1

Chair: *Peter Simonyi*, Department of Social and Economic Geography Eötvös Loránd University, Hungary

Schedule: Tuesday, 1 September, 08:30–10:15

*Julia Nagy**: Sustainability and urban governance - is sustainability a conscious purpose of the urban development practice?
 A case of Cluj-Napoca.

*Veronika Kiss**: How energy use caps can open the door of sustainability

*Natalia A. Koldobskaya**: The problem of solid waste disposal in the capitals of the Post-Soviet countries

*Virag Mathe**, *Dóra Péter*: Paperrand

SLOT2

Chair: *Peter Simonyi*, Department of Social and Economic Geography Eötvös Loránd University, Hungary

Schedule: Tuesday, 1 September, 10:45–12:30

*Alessandro Leto**: The Challenge of Food Security in the Mediterranean Basin

*Csaba Vaszko**: The role of corporate water users in the water, food and energy nexus

*Peter Simonyi**: Sustainable food consumption from a geographical point of view

T07

TEACHING FOR HUMAN GEOCAPABILITIES

Organizer: *Michael Solem*, Association of American Geographers, United States

Location: Room C

Session description: This workshop will introduce participants to an online teacher professional development course created for the GeoCapabilities project, funded by the U. S. National Science Foundation and EU Comenius Programme.

GeoCapabilities is an international collaboration to develop materials that illustrate for teachers how the acquisition and engagement with geographical knowledge and perspectives contribute to the growth of human capabilities. The project emphasizes the value of geographical knowledge for life, work, autonomy, citizenship and environmental responsibility in a highly complex and interdependent world – and the essential role of schools in providing access to that knowledge. The goal is to create more effective participation and contribution towards a better world by using a “capabilities” approach to geography education that develops geography subject knowledge, curriculum planning and curriculum making.

Participants will learn strategies for using the GeoCapabilities course to enhance teacher preparation programs and support international collaborative projects involving pre-service and in-service teachers. Four course modules will be demonstrated: 1) Defining and developing disciplinary capabilities, 2) Curriculum making by teachers, 3) Connecting capabilities with curriculum making, 4) Communicating capabilities in the classroom. Each module is enriched with multimedia and web technologies to support collaborations and dialogue among teachers and teacher educators in different countries.

SLOT1

Chair: *Michael Solem*, Association of American Geographers, United States

Schedule: Monday, 31 August, 17:15–19:00

T08

TOWARDS A NEW INTERNATIONAL STRATEGY FOR GEOGRAPHY EDUCATION (ISGE)

Organizers: *Henk Ottens*, Royal Dutch Geographical Society, The Netherlands; *Massimiliano Tabusi*, EUGEO, Università per Stranieri di Siena, Italy

Location: Room M

Schedule: Tuesday, 1 September, 15:00–16:45

Session description: The usefulness of geography education is widely acknowledged, but it is not always undisputed. Therefore, geographers and their organizations have the responsibility to keep geography education up-to-date and to maximize its contribution to people and society. This requires a regular reassessment and renewal of the profile, content, methods and organization of geography in schools to address the dynamics in the world and in teaching. In doing so, it is important to seriously take into consideration the way the outside world of non-geographers perceives the profile of geography and its contribution to society. The International Year of Global Understanding in 2016 offers the opportunity to (re)design teaching content and methods. Starting from everyday activities but also making visible the consequences global consequences and strategies for global understanding and sustainability.

T09

MAPTIONNAIRE – CREATE MAPS FOR INSIGHT AND ENGAGEMENT

Organizers: *Sakari Ellonen*, *Timo Hämäläinen*, Maptionnaire, Finland

Location: Room M

Schedule: Monday, 31 August, 13:00–13:45

Session description: Maptionnaire is an online service that brings together interactive maps and questionnaires. Its roots are in academic research from the fields of land-use planning and urban studies. It gets typically used in research projects focusing on place-specific human experiences to gather people-produced qualitative spatial data. Also, cities and municipalities have found the tool useful in their urban planning processes for civic engagement. Typical fields of application include urban planning, traffic and transportation planning, real estate, and development of parks and green areas. The most simple projects resemble post-it stickers on a map: just comments with co-ordinates. However, Maptionnaire comes with powerful quantitative and visual features to deal with complex data collection and analysis -- everything that is expected of modern survey research tools. As a result, the response data may be analyzed thoroughly using our browser based tools without separate GIS software or expertise. Exportation and importation of GIS data in standard formats and protocols is also fully supported. Discover Maptionnaire at www.maptionnaire.com

POSTER SESSION

P63 POSTERS SESSION

Organizers: *Róbert Győri*, Eötvös Loránd University Department of Social and Economic Geography, Hungary; *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Location: Main Hall

Schedule: Monday, 31 August, 14:45 – Opening ceremony of poster session

*Ottília Rusz**: Temperature changes in Transylvania (Romania) in period 1966-2010

*József Szeberényi**, *Valentin Cseh*, *Gyula Juhász*, *Klaudia Kiss*, *Blanka Lehotská*, *Roman Lehotský*, *Bernadett Szabó*, *György Varga*, *István Viczián*: Mysterious cavities of Burda Hills (South Slovakia)

*József Szeberényi**, *János Balogh*, *Éva Kis*, *Sándor Józsa*, *Klaudia Kiss*, *István Simon*, *György Varga*, *István Viczián*: Gravels of Visegrad Gorge

*József Szeberényi**, *Balázs Bradák*, *Sándor Józsa*, *Klaudia Kiss*, *András Markó*, *Alzbeta Medved'ova*, *Máté Megyeri*, *Mihály Molnár*, *Pavel Rostinsky*, *György Szakmány*, *Jacek Szmanda*, *György Varga*: Sediments and archeological findings of abandoned brickyard at Malá nad Hronom, Slovakia

*Vladimir Markovic**: Heat wave risk mapping in Novi Sad (Serbia)

*Stevan Savic**: Urban climate monitoring network in Novi Sad (Serbia)

*Mikoto Fujita Kukimoto**, *Yoshiki Wakabayashi*, *Yoshimichi Yui*: The role of communication tools among Japanese mothers living in Germany and France

Marcia da Silva, *Karla Rosário Brumes**: Geography in economic and territorial development policies: economy of resources and aggregation of parishes in Portugal

*Andras Donat Kovacs**, *Jenő Farkas*, *Éva Perger*: Dilemmas of the Hungarian-Serbian crossborder area from the perspective of the labour market

*Borbála Hortobágyi**, *Dov Corenblit*, *Jean-Luc Peiry*, *Johannes Steiger*, *Franck Vautier*: From plant traits to the fluvial landscape: different tools and methods for a multi-scale study of interactions between riparian vegetation and hydrogeomorphic processes

*Ivars Strautnieks**, *Ineta Grīne*, *Laimdota Kalnina*: Glacioaquatic sediments and landforms in Lielaue glacial depression, Western Latvia

*Ardelean Adrian Cristian**, *Ardelean Adrian Cristian*, *Alexandru Lucian Onaca*, *Urdea Petru*: Sediment storage quantification and postglacial evolution of a small alpine catchment (Doamnei Valley, Făgăraș Mountains, Romania)

*Ionela Corina Chirileasa (Dediță)**: The effects of the university presence on the local economic development – a case study of Ștefan cel Mare University of Suceava, Romania

*Miroslav Sifta**, *Jan Hatle*, *Silvie Rita Kucerova*, *Katerina Novotna*: Assessment of Territorial Representations in Geography Textbooks: A Tool Called "Topographical Names Map"

*Jenő Zsolt Farkas**, *Andras Donat Kovacs*: Land cover changes of nature conservation areas between 1990 and 2006 – case study from the Kiskunság National Park

*Asuncion Blanco-Romero**, *Jaume Barrera-Fusté*, *Sandra Saura-Mas*: Transdisciplinary innovation and excellence in teaching geography at university

*Vittoria Scorpio**, *Pietro P.C. Aucelli*, *Dan Bălteanu*, *Luca Pisano*, *Carmen M. Rosskopf*, *Veronica Zumpano*: Estimation of land value damage caused by landslides by means of matrices for different degree of knowledge: a case study from Molise region (Italy)

*Florentina Cristina Merciu**, *Loreta Cercleux*, *George Merciu*, *Vlad Paunescu*: Cultural conversion of water towers – a tool for conserving industrial heritage assets

Zsuzsanna Dezső, *Judit Bartholy**, *Ádám Leelőssy*, *Attila Merics*, *Tamás Mona*: Interactive weather forecast lab at the Eötvös Loránd University, Budapest

Zsuzsanna Dezső, *Judit Bartholy*, *Rita Pongrácz**, *Anna Zsilinszki*: The effect of large scale synoptic-climatological changes in the Carpathian Basin

*Rita Pongrácz**, *Judit Bartholy*, *Zsuzsanna Dezső*, *Cathy Fricke*, *Gergely Molnar*: Evaluation of the role of vegetation in urban climate

*Tamás Végh**, *Balázs Bradák*, *Erzsébet Horváth*, *József Kovács*, *Norbert Magyar*: Study of the surface development and valley geomorphology by multivariate data analysis in Paks-Dunakömlőd Loess Plateau, Hungary

*Nikola Jovic**: The distribution of IT sector companies in Belgrade: A spatial analysis

*István Viczián**, *János Balogh*, *Éva Kis*, *Agoston Juhász*, *Zoltán Szalai*, *József Szeberényi*: The physical and social geographical aspects of rehabilitation projects on the high bluffs threatened by landslides and collapses along the Danube River and Lake Balaton in Hungary

*Katarzyna Kulczyńska**, *Barbara Konecka-Szydłowska*: Split towns on the borders of the states of the Visegrad Group

*Eva A. Bogdan**, *Andrew Wilson*: Adapting the Dutch room for the river approach in Alberta, Canada

*Sandra Lúcia Videira Gois**, *Samara Videira Zorzato*: Financial globalization: the dissemination of foreign banks in Brazil – The Santander's Case Bank

*Joanna Jędruszkiewicz**, *Mariusz Zieliński*, *Bartosz Czernecki*: The high precipitation events over Lodz and its relation to atmospheric circulation

- Tin Lukić, Igor Ivan Leščešen*, Biljana Basarin, Dušan Sakulski, Andries Jordaan, Đurđa Miljković, Dragan Dolinaj:* Utilization of the rainfall erosivity index as an indicator of landslide occurrence along the southern slopes of the Bačka Loess Plateau – Case study of the Kula Settlement, Vojvodina (North Serbia)
- Rita Pongrácz*, Karolina Andre, Judit Bartholy, Ildiko Pieczka:* Estimation of regional climate change taking into account RCP scenarios
- Lara Fiorentini*, Francesco Faccini, Alberto Girani, Guido Paliaga:* The role of protected areas in geo-hydrological risk reduction: an example from the Genoa's Forts and Walls Park (Italy)
- Zoltán Szalai*, Kata Horváth-Szabó, Gergely Jakab, Klaudia Kiss, Balázs Madarász, Tibor Németh, Péter Sipos, Marianna Ringer:* Spatial differences in mineral development of meadow soils
- Éva Kis*, Ferenc Schweitzer, Dénes Lóczy, Andrija Bognar, János Balogh, József Szeberényi, István Viczián, Tímea Prodan:* Studies on paleoenvironmental changes: analyses of loess and loess-like sediments on Susak Island in the Adriatic
- Paola Giostrella*, Maurizio Alberti, Francesco Faccini, Massimo Melillo, Elisabetta Napolitano, Roberto Picasso:* Changes in rainfall regime and geo-hydrological events: an example from Chiavari city area (Eastern Liguria, Italy)

ABSTRACTS – PAPER SESSIONS

P01 A COHESIVE EUROPE IN 2020 – NEW INSTRUMENTS, NEW CONCEPTS, NEW TERRITORIES

Organizers: *Péter Balogh, Peter Schmitt*

Location: Room E

SLOT1 TERRITORY, SOFT SPACE, AND POLICY

Chairs: *Péter Balogh, Peter Schmitt*

Schedule: Wednesday, 2 September, 08:30–10:15

OF THE GOOD USE OF THE NOTION OF “TERRITORY” FOR THE COHESION POLICY

Authors: *Frédéric Santamaria**, Université Paris Diderot Paris 7, France; *Bernard Elissalde*

Keywords: geographical epistemology, local consciousness, perception, political-territorial control, territorial consciousness

Abstract: The growing success in the field of spatial planning and territorial development of the European use - at institutional level of the European Union, and sometimes in the research field - of the notion of “territory” seems to face a double stumbling block: in the first place, that of a conception that hardly can be differentiated from a classic definition of the notion, sending back to a definition of a space where is applied an established political power; secondly, that of an impoverished conception of the notion that often reduces it to a specific spatial scale (most of the time local) and to an approach centred on a functional economic analysis (e.g. local productive system). It so becomes an unreal social entity where the interactions society-space-regulation are identified only by indicators of growth, by narratives of “best practices” or by “success stories”.

From a work of documentary analysis (reports on Cohesion, ESPON reports), we will establish the above idea, then confronting it with the epistemological foundations of the meaning of the concept of territory. We shall then be capable of presenting the notion of territory as an operational tool, which would allow to analyze the spatial processes resulting from games of strengths, of ideas, of mental and material appropriations of the actors. In doing so, the concept of territory could ease the adjustment of the European action, led in the Framework of the Cohesion Policy, to the multidimensional reality of the space.

TERRITORIAL DIMENSION OF COHESION POLICY IN EU MEMBER STATES

Author: *Stepan Nosek**, Charles University in Prague, Czech Republic

Keywords: partnership agreement, territorial cohesion, territorial impacts, territorial policy

Abstract: The main goal of the contribution is to discuss how are the EU member states coping with the expected enhanced territoriality of their policies and to assess whether they are the only trying to satisfy the minimum standards of place-based approach set by the EU or are rather moving towards the new paradigm on policy-making characterized by more territorially-sensitive approach. The core of the contribution is the analysis of Partnership Agreements signed between the European Commission and individual member states which include the description of approach particular countries choose to deal with territorial dimension in its policies during the 2014-2020 programming period. The analysis showed there are significant differences among the EU countries and that the member states could be categorized into several groups sharing similar features. The analysis also enables to share good practices and interesting ideas applied by the member states in quest for territorial cohesion.

PLACE-BASED APPROACH: INSTITUTIONALISING SOFT SPACE

Author: *Estelle Evrard**, University of Luxembourg, Luxembourg

Keywords: EU Cohesion Policy, spatial planning, territorial planning

Abstract: Since the late 2000's, the place-based approach has become a crucial policy instrument for some prominent institutions such as the World Bank, the EU Commission and the OECD. It currently represents one of the cornerstones of the current Cohesion policy and will undoubtedly have deep consequences for regional development. While most of the Cohesion programmes are just about to kick off, this contribution will use two angles to shed some light on the significance of this policy approach. First, this approach has deep implications for practitioners at all levels of governance. Horizontally, it implies transcending sectoral approach and administrative boundaries. Vertically, it requires surpassing scales of governance. Second, this contribution will review the consequences of these challenges from a conceptual point of view. In particular, the place-based approach will be analysed against the background of the current debate on territory. These two angles will help concluding on the practical and conceptual contributions of this concept for the EU regional policy.

EGTC: A NEW DISCOURSE ON SPACE?

Author: *Gyula Ocskay**, CESCO, Hungary

Keywords: cross-border cooperation, EGTC, EU Cohesion Policy, functional cross-border regions, integrated spatial planning, ITI

Abstract: In my presentation, based on the experiences of our association (CESCI) gained in the field of creating and developing

EGTCs (9 in total) I am looking for an answer to the question whether it is possible to re-define the discourse on space and borders by using new instruments of the Cohesion Policy like EGTC and ITI.

For this purpose, I will briefly draft the evolution of cross-border cooperation in Europe, from the first informal forms through functional models to normative way of cooperation (i.e. the EGTC). I will highlight the needs occurred on the ground and the preliminary intentions of the „founding fathers” explaining the birth of this new instrument.

Secondly, I will focus on the metamorphoses the meaning of the EGTC went through, based on our own daily experiences and the text of the new EGTC Regulation.

Finally, I would like to explain, how EGTC can contribute to a new way of discourse on space, where the meaning of border is changing and new scopes of functionality and territoriality can be created. I will also touch upon the problems thematic concentration induces against integrated development (e.g. within the framework of an ITI) of cross-border territories. In this way, new Cohesion Policy makes impossible to develop the instrument of the EGTC toward a new form of governance.

NATIONALLY DRIVEN OR COMMUNITY LED? THE ROLE OF EGTCs IN THE IMPLEMENTATION OF COHESION POLICY 2014-2020 IN CENTRAL AND EASTERN EUROPE

Author: *Sara Svensson**, Central European University, Hungary

Keywords: cross-border cooperation, EGTC, multilevel governance, territorial governance

Abstract: European Union (EU) member states are encouraged to increase the role of European Groupings of Territorial Cooperation (EGTCs) in the implementation of 2014-2020 Cohesion Policy (regulation 1299/2013), which, in turn, is assumed to increase the quality of cross-border governance. The paper investigates whether, and how, this happens in Central and Eastern Europe by asking two questions: (1) Is cross-border governance and its outputs qualitatively different in borderlands where EGTCs are present? (2) How are EGTCs managing under conditions where local authority is contested by the national level, while there is pressure from Community level to increase local ownership through the application of community-led local development?

The paper draws on empirical data from Hungary, which has been one of the most active EU member states in advocating for, and supporting the establishment of, EGTCs, mainly due to the presence of Hungarian minorities in neighbouring countries. Currently 19 EGTCs have Hungarian participation, mostly registered in Hungary, and predominantly in areas with Hungarian minority presence on the other side of the border. While Hungary has promoted the establishment of these bodies, Europeanization have been one of the key factors behind centralized intergovernmental relations (Brusis 2014) and central authorities have been reluctant to let regional authorities set priorities (Dabrowski 2014). The paper analyzes document and interview data from one area with several active EGTCs (Hungarian-Slovak border) and one without (Hungarian-Austrian border). Findings will contribute empirical data and theoretical insight to the debate on the nature of the territorial shifts taking place in contemporary Europe.

SLOT2 PROCESSES AND IMPACTS OF EUROPEAN SPATIAL POLICIES

Chairs: *Péter Balogh, Peter Schmitt*

Schedule: Wednesday, 2 September, 10:45–12:30

WORLD REGIONALIZATION AND EUROPEAN UNION: A TERRITORIAL EXPERIMENT FOR THE COMPETITIVENESS AND COHESION PARADIGMS

Authors: *Didelon-Loiseau Clarisse**, Université du Havre. UMR IDEES, France; *Sophie de Ruffray*, UMR IDEES - Université de Rouen, FRANCE

Keywords: EU Cohesion Policy, globalization, region, territorial cohesion

Abstract: European Union regional policy includes both competitiveness and cohesion objectives that have contradictory consequences for the European territory. In a global perspective, one of EU's challenges is to maintain or improve its economic and geopolitical rank. This leads the EU to compare itself to other world regions. But the EU is quite an exceptional space: its political integration implies solidarity processes between European countries, mainly through the regional policy. This mechanism could happen in other world countries but not at the supra national level. In a global concurrence context other competitive world countries have not to "suffer" to that kind of mechanism that dedicates a part of their national wealth to the development of other countries.

To deepen this question and compare the EU to other world regions we implemented an experiment: we build some competitive and cohesion synthetic indicators and use them in a regionalization approach that includes no a priori spatial definition of world regions: EU space is not considered as a "sacred" space that should not be shrink nor enlarged. We will first present the method we implemented and then explore the world regions produced by both indicators. It will be interesting, to check what are the countries that should be "cut off" from the EU space to allow it to be the most competitive on the world stage, but also to see what would be the spatial configuration of other world regions if they had the same "cohesion" ideal than the European one.

EU COHESION POLICY AND THE (RE)PRODUCTION OF CENTRALITY AND PERIPHERALITY THROUGH SOFT SPACES

Author: *Stefan Telle**, Slovak Technical University, Slovakia

Keywords: EU Cohesion Policy, periphery

Abstract: With the "Big Bang" of the 2004 enlargement of the European Union (EU), economic disparities between EU member states are now larger than those between U.S. states. In fact, it has been argued that socio-spatial polarization has become a "striking feature" of the settlement system on the subnational scale, especially in Central and Eastern Europe. Thus, with regards

to EU Cohesion Policy, the eastern enlargement poses a serious challenge to the objective of “reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions” (TFEU, Art. 174). The paper indicates how the process of European integration under the primacy of interest representation at the EU level, is leading to a transformation of the political process. The emergence of multi-level metagovernance, understood as the management of disparate modes of coordination, is presented as a source for the emergence of inconsistent post-political strategies. Here, interest are framed as commensurable rather than conflicting, which allows the discursive framing of cohesion and competitive objectives as mutually reinforcing. This enables the depiction of EU Cohesion Policy as a delivery mechanism of the growth objectives of the EU 2020 Strategy and, in opposition to its treaty rationale of enhancing social, territorial and economic cohesion, shifts the spatial selectivity of Cohesion Policy toward spaces that may contribute to the competitiveness of the single market – including, but not exclusively, poly-centric metropolitan regions.

CONTEXTUALISING REGIONAL POLICY FOR TERRITORIAL COHESION IN CENTRAL AND EASTERN EUROPE

Author: *Bradley Loewen**, ITN RegPol2 / MEPCO s.r.o. / University of Economics, Prague, Czech Republic

Keywords: Hungary, path dependence, policy, The Czech Republic

Abstract: After a decade of EU membership, Regional Policy, including Cohesion Policy, has been widely disseminated and implemented throughout CEE Member States. However, the ability of national policies to deviate from established paths and the neoliberalisation processes underway in different political-institutional contexts have implications for the movement of policies, transformation of content and effectiveness of implementation. Amidst evidence of increasing polarisation and peripheralisation in CEE and the ongoing neoliberalisation of Regional Policy, the effectiveness of national policies to achieve territorial cohesion is brought into question.

Comparative historical analysis provides a method of inquiry into path dependent processes shaping institutions and affecting policy outcomes, and is therefore a useful tool for conceptualising regional political-institutional contexts and their implications for Regional Policy. Operational Programmes encompassed in national strategic documents from the Czech Republic, Estonia and Hungary over three programming periods are examined as key instruments for the implementation of Regional Policy, the comparison of which suggests different national perspectives towards common EU goals of competitiveness and growth as a means of achieving territorial cohesion. The research thus points to the need for deeper comparative understanding of regional policymaking institutions in order to understand the factors of effective policies in specific regional contexts.

TERRITORIAL IMPACTS OF THE EU COHESION POLICY IN IBERIAN PENINSULA (1990-2010)

Author: *Eduardo Medeiros**, CEG-IGOT Lisbon Univ., Portugal

Keywords: EU Cohesion Policy, territorial cohesion, territorial impacts

Abstract: This article addresses the territorial impacts of the EU Cohesion Policy in Iberian Peninsula (1990-2010). It makes use of an innovated TIA tool (the TARGET_TIA) which goes beyond the typical EU dimensional TRIAD (economy + society + environment) in assessing territorial impacts, as it also values the “territorial governance” and “spatial planning” related components in this fundamental analysis. Moreover, this TIA tool allows for a multivector enquiry, by including counterfactual evaluation elements, such as the multiplier, the exogenous, and the sustainable policy effects. In the end, our analysis concluded that the territorial impacts from the EU Cohesion Policy in both Iberian countries were positive (+1.3 in a scale from -4 to +4). Notwithstanding, these impacts were more positive in Spain than in Portugal. However, the obtained “generic potential impact value” for Iberian Peninsula was far from a desired one, which showed high inefficiencies in the use of EU funds. Also, a high variation in the analysed dimensions was detected. In sum, the positive impacts were higher in the socioeconomic cohesion and the environmental sustainability dimensions, whereas the territorial governance/cooperation and morphologic polycentricity ones obtained residual positive impact values. Furthermore, at the regional level, large asymmetries were detected in these estimated impact values, as the less developed Iberian regions showed, in general, less positive results, than the more developed ones.

GOVERNANCE MATTERS! REGIONALISATION AND DECENTRALISATION IN ROMANIA

Author: *Hunor Bajtalan**, Babeş-Bolyai University, Faculty of Geography, Hungarian Geographical Department, Romania

Keywords: EU Cohesion Policy, governance, regional development, Romania, territorial policy, territorial revision

Abstract: In the last few years mainly as a result of the Global Financial Crisis, but also due to the strengthening of previously unmet challenges - like climate change, growing international competitiveness - Europe is on the verge of deep socio-economic restructuring. Yet to tackle these challenges, the implementation of development policies are in the hands of national governments, their outcome being largely influenced by the quality of governance, the existence of efficient institutions, as well as by administrative capacity. Therefore governance still matters, and one of the best examples in this respect is Romania, which with an absorption rate of just 51,87% (31.01.2015) from the 2007-2013 MFF is one of the worst performers in the EU. In this respect is not incidental that from EU accession onwards the necessity to reform the highly centralized and bureaucratic administrative system through decentralization and a comprehensive administrative-territorial reform was a recurring, heated topic on the political agenda. Unfortunately however instead of a thorough analysis of the issue, the public was more preoccupied with the formal characteristics (borders and capitals) of the proposed meso-level administrative units (regions), than with the actual functionality of these (rights and competences). As a result the aim of the following paper is to analyze the process of region-building with a special focus on recent regionalisation discourses and projects, in relation to the question of governance in Romania. At the same time one of the key objectives of the inquiry is to explore the contribution of geography in finding viable solutions, functional models for the administrative-territorial reorganization of Romania.

P03 APPLIED URBAN CLIMATE AND BIOCLIMATE

Organizers: *Krzysztof Fortuniak, János Unger*

Location: Room I

SLOT1

Chair: *Stevan Savic*

Schedule: Tuesday, 1 September, 08:30–10:15

CHANGES IN SEASONAL PATTERN OF MORTALITY AND ITS RELATION WITH TEMPERATURE: RESULT FOR URBAN AREA OF NOVI SAD

Authors: *Daniela Arsenovic**, University of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia; *Branislav S Djurdjev*, University of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia

Keywords: mortality, seasonality, temperature

Abstract: Seasonal pattern of mortality is recognized and detected for a very long time. Seasonality of mortality is related with different demographic and social factors, environmental issue etc. Studies that have explored seasonal changes in mortality indicated temperature as one of most important factor. Temperature-related mortality has been associated with high as well as low outdoor temperature. Time series analysis of crude death rate (CDR) and coefficient of seasonal variation of mortality (CSVM) in the period from middle of 20th century until first decade of 21st century suggests that urban population in Novi Sad has higher winter mortality. Regression analysis show that crude death rate and temperature are negatively associated, but this pattern has decreasing trend. This finding also confirmed CSVM, which has decreased from 0.25 (95% CI: 0.102-0.256) in 1953/54-1963/64 to 0.07 (95% CI: 0.06-0.154) in 1998/99-2008/09 periods. Results for urban population of Novi Sad support hypothesis that differences of CDR between cold and warm period are due to climate change.

EVALUATION OF URBAN CLIMATOLOGICAL EFFECTS OF DISTRICT-LEVEL REHABILITATION PROGRAM

Authors: *Judit Bartholy**, Dept. of Meteorology Eötvös Loránd University, Hungary; *Zsuzsanna Dezső*, Eötvös Loránd University Department of Meteorology, Hungary; *Csenge Dian*; *Rita Pongrácz*, Dept. of Meteorology Eötvös Loránd University, Hungary

Keywords: satellite measurements, surface temperature

Abstract: Ferencváros is one of the 23 districts of the Hungarian capital Budapest. It is located near the river Danube in the southern central part of the city, which is very heterogeneous and consisting of 3- and 4-storey old buildings, block houses with either 4 or 8 levels, brown industrial areas, and large areas occupied by the railways system. Partly due to the functional and structural changes of special subsections of the district substantial local climatic changes occurred in the past few decades. From the local government concentrated efforts were made to complete several block rehabilitation programs already starting from 1980s. Since 1993 in the most densely built inner part of the district entire blocks were renovated and modified in order to create more livable environment for the citizens. Within the framework of these programs inner parts of the blocks were demolished, thus, inside the blocks more common green areas could be created. The climatic effects are evaluated on the basis of satellite measurements, namely, surface temperature fields derived from radiation data of seven different infrared channels measured by sensor MODIS (onboard satellites Terra and Aqua). From the surface temperature data rural mean values around Budapest are used to calculate pixelwise SUHI (surface urban heat island intensity). Our main goal is to analyze whether the generally positive changes of the built environment can also be recognized in the urban heat island effect of this area.

ESTIMATING SOLAR ENERGY POTENTIAL IN WARSAW

Author: *Bartosz Czernecki**, Adam Mickiewicz University in Poznan, Poland

Keywords: GIS, planning arrangement of solar panels, r.sun, solar energy, Warsaw

Abstract: Over 70% of the EU's energy is consumed by cities. Having that in mind, the Cities on Power project intends to contribute to the European Union target of 20% production of renewable energy by 2020. The project promotes the use of renewable energy in urban areas by delivering an interactive tool to support citizens in the decision making on new ways of energy supply.

To reach this target it was intended to provide a fully interactive IT-toolbox with maps of solar potential, which allows citizens and decision makers to estimate how much energy they can derive in a specific point from solar panels, when their investment returns and how it influences the natural environment.

Simulations were based on simplified 3D model of buildings in Warsaw. Main part of the simulations was done using the „r.sun” module dedicated to GRASS-GIS 6.4. Such a solution makes it possible to run whole simulation on high performance GNU/Linux machines, to conduct whole process for area of over 517,000,000 m².

To limit the final size of the database, results were clipped to surface of roofs only, using a binary data type (i.e. 0-shadow, 1-sunny) and synthetic atmospheric conditions (i.e. taking into account annual changes of sun declination, cloudiness, Linke atmospheric turbidity coefficient, etc.) as provided for engineering purposes by the Ministry of Transport, Construction and Maritime Economy. Such a solution allows following calculations: direct, diffuse and total solar radiation for every square meter of a building's surface in Warsaw.

MAPPING THE LOCAL CLIMATE ZONES AND APPLICATION IT AS A LAND USE INFORMATION FOR MUKLIMO URBAN CLIMATE MODEL

Authors: *Tamás Gál**, Dep. of Climatology and Landscape Ecology, University of Szeged, Hungary; *Anita Bokwa; Petr Dobrovodny; Jan Geletic*, Masaryk University Brno, Czech Republic; *Ágnes Gulyás; Monika Hajto; Brigitte Hollosi; Rafal Kielar; Michal Lehnert*, Department of Geography at the Faculty of Science, Palacký University in Olomouc, Czech Republic; *Nóra Skarbit*, University of Szeged, Magyarország; *Pavel Stastny; Marek Svec; János Unger*, Dep. Climatology and Landscape Ecology, University of Szeged, Hungary; *Miroslav Vysoudil; Jakub Walawender; Maja Zuvela-Aloise*

Keywords: climate change, local climate zones, urban climate model

Abstract: Urban climate modelling is essential to reveal the trend of the urban heat load caused by the climate change. Within the project “Urban climate in Central European cities and global climate change” (IVF-21410222) we examine the impact of global warming on Central European cities. Therefore we perform modelling analyses of possible future changes of urban climate in four cities in Hungary, the Czech Republic, Slovakia and Poland. For this analysis we use the urban climate model MUKLIMO_3. Different input datasets are necessary to describe the model domain. The so-called Land Use Table determines the land use characteristics of the study area. This table includes land use classes, and for each class there are 26 physical parameters (building fraction, wall area index etc.). Another input data is the Land Use File, which contains the identification value of the land use class for every grid cell of the model domain. The advantage of this model is the possibility to use arbitrary land use classification system. The recently developed Local Climate Zones (LCZ) classification system can be a good choice for the land use information, because it is a climate-based land use classification system and it describes the physical conditions of the local-scale environment. It is not site specific, and the different classes represent different thermal reactions. We applied Bechtel’s method for mapping of the LCZ classes, using satellite data (Landsat 7, 8). In this paper we present this land use mapping process in the example of Szeged, Hungary and the preliminary results of the model.

DELIMITATION OF LOCAL CLIMATE ZONES BASED ON ZABAGED DATABASE IN THE CZECH REPUBLIC

Authors: *Jan Geletic**, Masaryk University Brno, Czech Republic; *Michal Lehnert*, Department of Geography at the Faculty of Science, Palacký University in Olomouc, Czech Republic

Keywords: GIS mapping, local climate zones, ZABAGED

Abstract: In recent years the concept of Local climate zones (LCZ) has become the standard in study of urban climate. There are therefore efforts to use this classification as a mapping method. With a radical shift in the concept of LCZ have emerged new methodological problems (e.g. spatial resolution/pixel size, the degree of generalization, the method of calculating the physical a geometric parameters, validation and standardization of classification procedures etc.). Developing universal LCZ mapping method for the Czech Republic we are trying to address all of these problems. The first prototypes of classification based on decision rules established on the training areas were completed for Brno and Olomouc and their surroundings. Preliminary research has shown that the most suitable input data for classification provides vector database ZABAGED® covering the entire area of the Czech Republic. Validation through comparison of classification results based on data from ZABAGED® and classification result based on our own precise ad hoc data show a very good results for testing areas. Manual correction of input attributes is in some cases still unavoidable. However data preparation procedure is already reasonably time consuming. It turns out that LCZ classification made on the basis of the real physical properties of the environment is more accurate than classification based on remote sensing data based characteristic and therefore deserves further research.

ATMOSPHERIC URBAN HEAT ISLAND DETECTION BY DIRECT MEASUREMENTS IN CLUJ-NAPOCA CITY, ROMANIA

Authors: *Ioana Herbel**, Romania; *Antonio Flavius Ciupertea*, Babes-Bolyai University, Romania; *Adina-Eliza C Croitoru**, Babes-Bolyai University, Romania; *Gabriela Victoria Harpa*, Babes-Bolyai University, Romania; *Ionuț Rus*, Babes-Bolyai University, Romania

Keywords: atmospheric urban heat island detection, Cluj-Napoca, Romania

Abstract: The intensification of the urbanization process in the last decades affects not only the quality of the environment but also the quality of life in large cities worldwide. In Romania, as a former communist country, another important process that has a major influence for the urban climate is the forced industrialization from the communist era. One of the most important consequences of the above mentioned processes is the urban heat island (UHI), a climatic phenomenon that involves increased air and surface temperature values in the city when compared to the nearby rural areas.

The purpose of this study is to identify these temperature differences and to obtain the first overview of the atmospheric urban heat island (AUHI) in Cluj-Napoca city, Romania. In order to highlight the intensity of this phenomenon in the study area, a mixed method has been used that combines a mobile transverse study on three different routes along the city street network, performed by car, with observations in fixed, representative points from the city. All the observations have been performed at 1.5 m above the ground level, during the night, in different seasons and weather conditions. The data that resulted from the mobile transverse method have been subjected to time and altitude corrections, based on the fixed points measurements. The deviation of all the points compared to the center of the city has been computed. The hot spots of the cities have been identified in central area and in concrete block of flats neighborhood. The results of the research are detailed in the content of the paper.

HEAT STRESS IN URBAN AND SUBURBAN LANDSCAPE AND ITS SPATIAL DIFFERENTIATION ON THE EXAMPLE OF A MEDIUM-SIZED CENTRAL EUROPEAN CITY

Authors: *Michal Lehnert**, Department of Geography at the Faculty of Science, Palacký University in Olomouc, Czech Republic; *Petr Kladiivo; Miroslav Vysoudil*

Keywords: environmental hazard, urban climate

Abstract: In according to researches focused on recent climate warming in the Central Europe, the study of heat stress in urban and suburban landscape in this region is indicated as an important topic. Based on measurements of station network in Olomouc (Czech Republic), the temporal and spatial variability of heat stress in the Olomouc region was analysed. We can find limits of temperature and so called Humidex negatively affecting the human organism in the literature. Due to detailed statistical analysis of collected data was possible to recognize significant differences between locations registering long periods of high temperatures and locations with long periods of critical values of Humidex. The longest period with exceeding the threshold temperatures were occurred in the mixed areas of open midrise development (LCZ 5) and open spaces with low proportion of built-up areas (LCZ 9). Areas connected with a long periods of critical values of Humidex besides high temperatures are also influenced by high evaporation associated with irrigation, waterlogged soil and water bodies. On the other hand, the shortest period of critical values of Humidex were identified in the city centre with dense pattern of midrise building (LCZ2) and in zones suggesting more vegetation, near forests (LCZ B) etc. It indicates that water vapour pressure field does not correspond with temperature field and therefore significantly modifies the spatial and temporal variability of heat stress in the city and its surroundings. Consequently, the further research of spatial variability of humidity in areas with a high population density is required.

THERMAL COMFORT OBSERVATIONS IN THE CITY OF NOVI SAD (SERBIA) IN 2014

Authors: *Dragan D Milošević**, Climatology and Hydrology Research Centre, Faculty of Science, University of Novi Sad, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia; *Tamás Gál*, Dep. of Climatology and Landscape Ecology, University of Szeged, Hungary; *János Unger*, Dep. Climatology and Landscape Ecology, University of Szeged, Hungary

Keywords: local climate zones, monitoring network, Serbia, thermal comfort

Abstract: Urban climate monitoring systems was established in Novi Sad (Serbia) in 2014. This system is based on the Local Climate Zones (LCZ) classification system, GIS model calculations and field work.

In the built-up area of Novi Sad (55 km²) 7 LCZ types and 2 LCZ land cover types in nonurban environment in the vicinity of the city were delineated. 27 stations equipped with air temperature and relative humidity sensors were distributed across all LCZs. This system provided 10-minute measured temperature and relative humidity data, as well as calculated human comfort (Psychologically Equivalent Temperature - PET) index values since June 2014. Suitability of the developed monitoring system for human comfort observations in different built-up areas of the city and its surroundings was investigated.

Preliminary results showed that during heat waves PET index had surplus values (>6°C) in midrise LCZ type compared to the nonurban areas (LCZ D – low plants), while human thermal comfort differences among other built-up LCZs were smaller. As expected, largest differences occurred during evening and nocturnal hours.

“ENVIRONMENT TO CIRCULATION” AND “CIRCULATION TO ENVIRONMENT” APPROACHES IN THE ANALYSIS OF ROLE OF SYNOPTIC CONDITIONS AND WIND REGIME IMPACT ON PM CONCENTRATION OVER THE METROPOLITAN AREA OF HAIFA, ISRAEL

Authors: *Hadas Saaroni**, Tel Aviv University, Israel; *Reuven Givati; Eldad Levi; Baruch Ziv*

Keywords: climate change, particle matter, pollution

Abstract: Relatively high Particle Matter (PM) concentrations, detected over the Middle East and Israel, are attributed to natural dust outbreaks as well as to local and remote anthropogenic sources. The spatio-temporal distribution of the pollution is highly dependent on the geographical characteristics of the region, such as the complex terrain of Haifa, the nearby bay structure and the atmospheric conditions determined by the combined meso-, local and synoptic-scale circulations. Yuval and Broday (2006) showed that while dust outbreak events are excluded, heavy traffic load is a main source for PM₁₀ in the Haifa metropolitan area, though this area has major industrial plants, including the national petroleum refineries, petrochemical and agrochemical industries.

The present research analyzes the role of synoptic conditions and wind regime in the temporal and spatial distribution of PM₁₀ and PM_{2.5}. The “environment to circulation” approach is adopted (following Yarnal 1993, Yarnal et al. 2001 and Dayan and Tubi 2012) through the “pollution potential” regarded as percentage of exceeding days for each regional synoptic type. This is based on the classification of Alpert et al. (2004). In order to get insight into the relevant mechanisms, the diurnal evolution of the wind field for each synoptic type is derived and analyzed, expressing the “circulation to environment” approach.

Generally, exceeding days of PM are dominated by natural dust outbreaks even in this highly industrial area. However, its spatial distribution within the study area may point at the contribution of local sources. Detailed results will be further presented.

TOWARDS CLIMATE CONSCIOUS URBAN DESIGN – DEVELOPING A SYSTEM OF PLANNING CRITERIA IN HUNGARY

Authors: *Flóra Szkordilisz**, Budapest University of Technology and Economics, Hungary; *Lilla Égerházi*; *Tamás Gál*, Dep. of Climatology and Landscape Ecology, University of Szeged, Hungary; *Ágnes Gulyás*; *Márton Kiss*, University of Szeged, Hungary

Keywords: climate conscious urban design, envi-met, planning criteria, public space development

Abstract: Urban microclimate has been a fashionable topic in the last decade to involve quite a few researchers. Many have come to the conclusion that green surfaces are essential in achieving a climate-conscious urban environment. Apart from greenery there are also quite a few good and usable tools in order to improve urban microclimate such as solar sails, water surfaces, permeable paving, etc. It has come so far to facing also the question how urban planners can be helped by researchers to use in everyday planning routine the results of theoretical researches. In the new programming period of the European Union (2014-2020), the novel system of planning and funding gives the opportunity to implement the interests of climate conscious urban design. One of the main challenges urban planners and architects will have to face is to trigger a way of planning methodology in order to create an urban environment which can handle current climatic problems.

In our work we present the first version of a targeted indicator system, which can be used as planning criteria in the EU-funded urban public space development processes.

The main tool of our research was the ENVI-met model, which enables the quantitative comparison of the microclimatological effects of the usable interventions and their indicators. The results highlight the outstanding importance of trees among the possible solutions, and the need for integrated solutions with regard on every aspect of climate sensitive design.

INTRA-URBAN CLIMATE OBSERVATIONS IN TWO CENTRAL EUROPEAN CITIES BASED ON ONE YEAR NETWORK DATASETS

Authors: *Nóra Skarbit**, University of Szeged, Magyarország; *János Unger*, Dep. Climatology and Landscape Ecology, University of Szeged, Hungary; *Tamás Gál*, Dep. of Climatology and Landscape Ecology, University of Szeged, Hungary; *Stevan Savic*, Climatology and Hydrology Research Centre, Faculty of Science, University of Novi Sad, Serbia

This study introduces urban climate monitoring systems implemented in Szeged, Hungary and Novi Sad, Serbia in 2014 and analyzes the first datasets of 2014-2015. In order to ensure a representative number and placement of stations, the selection of measurement sites was based on Local Climate Zone (LCZ) maps developed for both cities. During the processing of the incoming data (air temperature and relative humidity, as well as global radiation and wind speed) a human comfort index (Psychologically Equivalent Temperature) is calculated from these parameters with a neural network method, and the measured and calculated parameters are interpolated linearly into a regular grid with 500 m resolution. As the results show the largest intra-urban thermal differences between the LCZ areas occur in the nocturnal hours reaching even 5°C. In the spatial distribution of human comfort conditions there are distinct differences in the strength of the loading between the neighbourhoods during the daytime. Overall, it can be stated that the monitoring networks are able to provide beneficial information for urban climate research and for the wider audience, too. They record data with proper spatial and temporal resolution and the accuracy of the sensors is satisfactory. Based on our evaluation the site selection was successful, as the temperature has different characteristics at sites with differently classified environment. The planned operation time of networks is minimum five years so the available long data series will provide an opportunity to perform spatially and temporally very detailed climatological investigations in relation to urban environment.

EVALUATION OF OUTDOOR THERMAL COMFORT IN URBAN TRANSFORMATIONS OF NOVI SAD (SERBIA)

Authors: *Stevan Savic**, Climatology and Hydrology Research Centre, Faculty of Science, University of Novi Sad, Serbia; *Ivana Bajcsanski*; *Dragan D Milošević*, Climatology and Hydrology Research Centre, Faculty of Science, University of Novi Sad, Trg Dositeja Obradovića 3, 21000 Novi Sad, Serbia

Keywords: algorithm, grasshoppers program, Novi Sad, Serbia, thermal comfort

Abstract: The automated calculation method for the outdoor thermal comfort calculation at different locations at street level is presented in Novi Sad (Serbia), as an example. With this automated calculation procedure - past, present and future state of the thermal environment in the urban transformations was calculated and compared. Our calculations are based on the usage of Grasshoppers program in which the algorithm was created and Universal Thermal Climate Index (UTCI) was calculated. This new approach provides faster acquisition of the results, detailed options for parameters input and numerous options for the graphical representation of the results. Application of this procedure can provide significant insight into the changes of the thermal environment as a consequence of urbanization that have to be taken into account in order to provide a lively urban environment for its residents.

Organizer: *Jaroslav Biolek*

Location: Room H

SLOT1

Chair: *Jaroslav Biolek*

Schedule: Wednesday, 2 September, 08:30–10:15

EXPLORING EPISTEMOLOGY OF PSYCHOGEOGRAPHY – EXPERIENCES FROM MENTAL MAPPING WORKSHOPS

Authors: *Jaroslav Biolek**, Masaryk university, Czech Republic; *Katarína Tulaková*, Masaryk University, Brno, Czech Republic

Keywords: art practices, Czech cities, geographical epistemology, mental mapping, psychogeography

Abstract: More than fifty years ago Situationist movement opened up a discussion about production of geographical knowledge and manifestation of our sense of place through art practices. By using psychogeographical methods the urban space has not been only investigated and experience but also actively per-formed. However, there is still a question what kind of knowledge art activities as a tool or method for geographical research produces and what the relationship between scientific geographical knowledge and artistic experience is.

Our paper presents some outputs from mental mapping workshops which were taken place in Czech cities and towns. In order to broaden epistemological possibilities of exploring the urban environment we tested a range of psychogeographical and artistic practices in which various actors (students, pupils, families, communities as well as officers) were involved. They thus walked through and performed in the city or town according to guideline, anomalously experienced the urban environment (listening and smelling, enjoying each step, zooming on details, following colours, looking for a genius loci or just irrationally thinking of place) and then sketched or recorded these feelings into mental maps. After each workshop, their sketches, experiences and feedbacks were analyzed with regard to geographical epistemology and practical implications. Therefore, in our presentation not only features of this epistemology are introduced but also a specific application of these practices in the urban planning is suggested.

MAPS OUT OF PLACE: DISPLACING CARTOGRAPHY IN THE REALM OF CONTEMPORARY ART

Author: *Laura Lo Presti**, University of Palermo, Italy

Keywords: art practices, map, postcolonialism

Abstract: As Brian Harley wrote “maps are too important to be left to cartographers alone” (2001: 239). Not for nothing maps have played a pivotal role as weapons of imperialism, as discursive formations disciplining the link between academic practice and political power and acting as social hieroglyphics in the words of Marx.

The aim of this paper is plotting a course towards a divergent use of map-making as creative process and as a set of tactics to destabilize, challenge and re-imagine geographical mapping practices, moving beyond their direct link with power, war and the male Western “episteme”.

What is at stake in this provisional critical route is to understand what function and dysfunction, epistemological possibilities or aporias can affect the “modern cartographic ideal” when we displace maps in the world of contemporary art. For instance, looking at those works where the geometry of power is revealed, the bodies strike back, geopolitics and intimate spaces act as a singularity and maps eventually crumble.

The value of “deterritorialized epistemologies” (Rogoff 2001) is the chance, sometimes risky, to grasp those alternative representational practices that can emerge through the strategic opening of boundaries of different disciplines.

After all, as Edward Said (2000) reminds us, “being out of place” - in this circumstance on the blurred border or in-between different fields of knowledge - can be an ideal condition to deconstruct, blemish and rebuild languages and practices of research.

SENSITIVE LANDSCAPE BORDER LINES

Author: *Santiago Pedraza Humildad**, Escuela Superior de Arquitectura de Madrid, Master de Proyectos Arquitectonicos Avanzados, Laboratorio de Paisaje, Spain

Keywords: (de)territorialization, arts, assimilation, border, borderscape, experience, landscape, perception, territorial consciousness

Abstract: The intention of this document is to provoke an “Territorial consciousness” of the different limits that capture de Landscape Border which is not only “geographic limit”, its is also “personal and physical limit”. Because in this kind of border landscapes you capture all of them and their intensities. Therefore it is important to express the suffering of person as consequence of delimitation of territories, in this case with art paintings, art strokes and poetry which it expresses a landscape perception.

Each one of the line that contains a place becomes a limit that man has to cross many layers of borders: where nature condenses or where it disperses or where everything occurs, limit occurs. “The entrapment of the territories lines” make you experience it. To become again the connection between Nature and Man, like a person who “sees and captures the border landscape”.

To build the lines that connect peoples that trespass territories and where people are mixed to become an “Unión”, “Nor Dis-union”. So the intention is to “reconcile conflicting poles” and therefore “to achieve interspaces that induce the knowledge of each others (Africa-Europe, Asia-Europe)”.

Nature must be a Whole, opposed to the idea of desintegration promoted by men who have always the desire of territorialization. The borders and its assimilation how limits are generated in the human mind, does not come from the “Real Nature” of man, who really “should seek to unite, to express collective thought of men needs as a social and global being”.

THE IMPACT OF CULTURAL PROSUMERS IN REDEFINING THE IMAGE OF CLUJ-NAPOCA CITY

Authors: *Pop Ana-Maria**, Babeş-Bolyai University, Faculty of Geography, Centre for Regional Geography, Romania; *Lelia Papp*, Babes-Bolyai University, Faculty of Geography, Cluj-Napoca, Romania

Keywords: Cluj-Napoca City, cultural capital, prosumers

Abstract: The image of a city could be defined also by its culture; this is why different European cultural programmes are proposing alternative offers to the inhabitants' usual life. In this context, Cluj-Napoca City does not make any exception as the 2015 European Youth Capital and candidate for the 2021 European Capital of Culture. While the major cultural institutions (theatres, operas, cinemas, etc.) or local authorities are providing diverse cultural offers, there are some productive consumers trying to make the urban space more attractive. The aim of this article is to emphasize the empowerment of citizens as an active community, the existing cultural offers that involve the prosumers which could support any European cultural programme and the population's perception on their real implication in some art and culture products.

CULTURAL PRODUCTION AND CONSUMPTION NETWORKS IN PERIPHERAL URBAN SPACES: LESSONS FROM BARRIERA, TURIN (ITALY)

Authors: *Carlo Salone**, DIST, Politecnico e Università di Torino, Italy; *Sara Bonini Baraldi*; *Giangavino Pazzola*

Keywords: art practices, culture, knowledge production, urban regeneration

Abstract: This paper deals with the issues of cultural production and consumption within a peripheral urban neighbourhood as elements which potentially contribute to foster the sense of place, the community belonging and the collective action. Starting from a critical perspective, the paper has two main purposes: to investigate the degree and ways of self-organisation of the practices occurring in it in the field of cultural production and consumption; to assess the economic and social effects of these practices on the neighbourhood life.

The case-study concerns a large peripheral area in the north-eastern corner of Turin (Italy), formerly one of the most industrialised zones of the city. Over the last years, and in particular after the real-estate bubble burst of 2007-2008 and its overall consequences for the industrial sector, in Barriera a lively concentration of initiatives and networks of culture has been taking place, re-defining the urban and social space. These initiatives seem to be innovative for many reasons:

- the goals of the creative processes undertaking (alternative cultural contents, social participation and cohesion, urban regeneration, place-making);
- the organizational arrangements (network relationships, formal and informal tools of partnerships);
- the economic aspects of the activities carried on (employees, start-ups).

Particularly, two aspects deserve to be investigated:

- the degree of “spontaneous”, self-organised activism;
- the economic and social impact of the new activities in the district, measured using qualitative indicators.

The analysis has been conducted mainly by qualitative methodologies, according to an “ethnographic” approach based on de-structured and semi-structured interviews to local actors involved in the neighbourhood initiatives and the participating observation techniques.

P05 BENEFITS OF REMOTE SENSING FOR GEOGRAPHY

Organizer: *Márton Deák*

Location: Room I

SLOT1

Chair: *Márton Deák*

Schedule: Monday, 31 August, 17:15–19:00

GATEWAY TO THE HUNGARIAN AERIAL PHOTO ARCHIVE OF FÖMI

Author: *Péter Braunmüller**, FÖMI, Hungary

Keywords: aerial photo, archive, digitization, fentrol.hu, geospatial, open data

Abstract: The Institute of Geodesy, Cartography and Remote Sensing (FÖMI) successfully finished the Digital Aerial Photograph Archive project, founded by EU, on 30th June 2014. There are almost a half million frames in the archives from the period of 1959 - 2005. By the end of the project we have finished digitizing the frame centres of all photos and the scanning of 15 % of the aerial photo archive of FÖMI. The digitized aerial images can be freely browsed on the Internet at fentrol.hu. After an open registration every user can tag, comment or annotate a photo. The original scanned images can be bought online (including georeference files also), or could be downloaded in reduced resolution for free-of-charge.

In the presentation we will show the steps of creating the digital aerial photo archive (fentrol.hu) highlighting the most popular usage fields of the available data. We also introduce how crowdsourcing can help improving the georeference information of the aerial photos, plus we give some international examples of such online databases.

LOW-ALTITUDE AIRBORNE REMOTE SENSING BY MICROLIGHTS AND MICRODRONES: NEW POWERFUL TOOLS IN GEOGRAPHIC RESEARCH

Author: *Gianluca Casagrande**, GREAL - Università Europea di Roma, Italy

Keywords: Earth observation, GIS mapping, innovation

Abstract: The recent, convergent developments of technology in the fields of sensors, image processing softwares and civil aeronautics allowed for the advent of new, accessible and very powerful tools at the service of Geographic research. Applications of traditional airborne remote sensing can be now significantly expanded by the use of innovative joint configurations of minimal manned and unmanned aerial platforms with low-cost sensors and consumer-level computing and processing systems. The potential of such integrated technologies to science and operational contexts is very wide and only partially explored to this day. A scenario involving the joint, integrated use of light aircraft, micro-drones and everyday hardware/software systems offers much more than the accessibility of traditional airborne RS. More users can access the technologies and this means that more scientific and practical work can be done and coordinated among a higher number of operators. Surveys can be more easily tailored on the specific needs of many different kinds of geographic investigation; new types of data can be included in the geographer's analyses; whole new operational envelopes appear, suggesting that new methods can be envisioned for applying RS to a deeper understanding of both spaces and places. This fact indicates that a wider use of the new tools is recommendable, and that European regulations on these devices should take the new opportunities into proper account; which does not appear to be always the case. The presented work summarizes the methodological and practical conclusions reached on the topic by the author, after six years of lab and field research.

WEB-BASED GIS APPLICATIONS IN PLANETARY LANDFORM ANALYSIS

Author: *András Sik**, Department of Physical Geography, Eötvös Loránd University, Hungary

Keywords: GIS, Mars, planet, satellite measurements, webmap

Abstract: The storage, processing, integration and visualization of planetary datasets – mainly large raster files acquired via remote sensing – recently are carried out by geoinformational software packages, while the results are often published on interactive webmap applications, for scientific teamwork coordination and public dissemination purposes as well. The optical satellite images, digital elevation models (DEM) and other type of planetary data sources acquired via remote sensing techniques by orbiters' instruments are searchable and downloadable via public internet databases, even can be combined with the direct field measurements and ground truth information of various landing space probes. The best examples of this "planetary landform analysis" workflow are related to Mars, because of the great variety of detailed spatial datasets characterizing its surface morphology and topographic diversity. Either proprietary or open source GIS applications can be used for these planetary missions, depending on the specific tasks and software limitations.

INFLUENCE OF HUMAN ACTIVITIES ON THE LANDSCAPE OF THE DANUBE DELTA

Author: *Slave Camelia**, university of agriculture science and veterinary medicine Bucharest, Romania

Keywords: antropic, Danube, landscapes

Abstract: Danube Delta is the largest natural reservation in Europe. Since 1991, Delta has been included in the World Natural Heritage. Delta represents an area of great scientific interest because of the richness of vegetation and fauna. These things makes it unique of this area in Europe. This paper aims to analyze different combinations offered by the satellite Landsat 8 band.

SPATIAL CHARACTERIZATION OF SOIL PROPERTIES BY DIGITAL SOIL MAPPING – EXAMPLES FROM THE CARPATHIAN BASIN

Authors: *Katalin Takács**, Institute for Soil Science and Agricultural Chemistry, Centre for Agricultural Research, HAS, Hungary; *László Pásztor*, Institute for Soil Science and Agricultural Chemistry, Centre for Agricultural Research, HAS, Hungary

Keywords: digital soil mapping, Earth observation, geostatistics, terrain analysis

Abstract: The aim of soil mapping is to explore and visualize the spatial extension and variability of the thematic knowledge on soils. Soil maps are thematic maps, which can present information on the primary or derivative soil characteristics, soil classes and knowledge about the processes, function and services of soils. The method for obtaining information on soils is sampling which results only point data and should be spatially extended by properly chosen methods.

Digital soil mapping (DSM) integrates the soil-related, environmental information with geostatistical and datamining methods within GIS environment. Modelling the soil-landscape relation enables the recognition of spatial variability of soil forming factors – like topography, climate, lithology or vegetation –, which determines the target soil properties. For the spatial extension of point related information, the DSM methods need environmental auxiliary variables which are in direct or indirect relation with the target soil property and supply exhaustive coverage for the area of interest. Environmental variables can be generally derived from digital elevation models (DEM), land cover data and Earth Observation (EO).

Based on DEM and its derivatives, topographical and geomorphological information can be obtained, which are in relation with the lithological, relief and run-off properties of the target area. Remote sensing provides quantitative information about the bare soils and vegetation which is also an efficient indicator of various soil properties.

Our paper will present some example for the application of DSM methods and how the each selected environmental variables and geostatistical methods improves the mapping of target soil properties.

CHALLENGING BORDERS: A CRITICAL PERSPECTIVE ON THE RELATION BETWEEN STATE, TERRITORY, CITIZENSHIP AND IDENTITY

Organizers: *Anna Casaglia, Jussi Laine*

Location: Room E

SLOT1

Chair: *Anna Casaglia* Discussant: *Jussi Laine*

Schedule: Tuesday, 1 September, 08:30–10:15

LOCAL CROSS-BORDER COOPERATION AS A TERRITORIAL STRATEGY FOR THE RE-TERRITORIALIZATION OF PERIPHERICAL REGIONS? CASES STUDIES IN THE EASTERN PYRENEES?

Author: *Matteo Berzi**, Universitat Autònoma de Barcelona (UAB), Spain

Keywords: coastal areas, community-led local development, cross-border cooperation, EU Cohesion Policy, territorial governance

Abstract: The paper, based on the doctoral thesis still in progress, examine if local cross-border cooperation can be a territorial strategy in order to generate a shared endogenous local development, able to lead to a re-territorialization of cross-border spaces.

Through the territorialistic approach (Magnaghi, 2001) is possible to interpret the cross-border areas as territorial systems with a specific milieu and a network of local actors, despite the presence of a national border that led for centuries to legal, administrative, linguistic, psychological and cultural differences. Through the Communitarian framework, policies, strategies, tools and operational programs new forms of cross-border governance have been encouraged. The tools and concepts introduced by the European legislator are nowadays essential to support the CBC on a local scale, (especially in a context of economic crisis). Moreover, the empowerment of local communities and institutions are a key factor to bet on a future polycentric Europe.

Two case studies along the same border (France-Spain) will be presented. The first is the Cerdanya valley (located in the Eastern Pyrenees) a cross-border micro-region with an important historical and present CBC. The second one is the Cross-Border Catalan Coast, where despite the historical, socio-economic, environmental and geographical similarities, the CBC is still not perceived as a viable spatial strategy. It will be shown the territorial context, the historical and the current cross-border cooperation, stressing the limits and potentialities of these cross-border spaces located in the "Eurodistrict of the Catalan Cross-border Area".

"NEW BERLIN WALLS" AND WALLING UP SOVEREIGNTY AT THE BORDER

Author: *Edward Kieran Boyle**, Center for Asia-Pacific Future Studies, Kyushu University, Japan

Keywords: border, mental mapping, political-territorial control, state power, territory

Abstract: The 25th anniversary of the Berlin Wall's fall in November 2014 only emphasized the misplaced nature of initial optimism that this fall would mark the end of such walls. As The Guardian had put it exactly a year earlier, "mankind is building separation barriers at a rate perhaps unequalled in history - at least 6,000 miles in the last decade alone" ("Our walled world" November 19, 2013). The anniversary has instead given licence to criticize the emergence of "new Berlin Walls" across Post-Soviet space, not only with regards to the process of "borderization" occurring between Georgia's breakaway territories and the remainder of that country, but also those supposedly being erected between Ukraine and the Russian Federation. The emergence of such barriers in territory largely unified twenty-five years previously is vital to understanding the relation between the increasing and unceasing transnational flows across these borders marked by the Berlin Wall's collapse and the concern with demarcating and securing of space. This notion of space reflects a process of bordering that seeks the permanent performance of sovereignty necessary for the ontological security of sovereign states. Such sovereignty is sought through maintaining a performance of state-claims woven into the fabric of society, but is constantly challenged by the presence of those exceptions that necessitate the construction of walls in the first place. It is the border's presence at the sub-state, state and inter-state levels that draws our attention to the relational character of the sovereignty these walls are seeking to underpin.

DISQUIET AT EUROPEAN BORDERS: SCALING, GEOPOLITICS AND EVERYDAY BORDERING

Author: *Hans-Joachim Bürkner**, Leibniz Institute for Regional Development and Spatial Planning, Germany

Keywords: bordering, geopolitics, scaling, South-East Europe

Abstract: The recent geopolitical involvement of the EU in its eastern neighbourhood has not only changed international political relations and perspectives on non-EU regions. It has also stirred up local politicians, civil society protagonists and economic agents at its external borders. Virtually over night, new perspectives and variable scopes of action came into sight where formerly fixed local frameworks seemed to restrain heterogeneous projects and networks. The rescaling of social relations has affected various agendas, transforming life at the border without finding local protagonists really prepared. Especially the borders between the EU and the next accession candidates are being increasingly exposed to heterogeneous rebordering (in the sense of producing altered modes of everyday references to, and utilization of, borders). What makes such rebordering difficult to handle is the fact that it almost inevitably includes rescaling, meaning that networks, scopes of action and access to power resources become fluid. They

may flexibly expand or shrink, upsetting some and stimulating others. Seeking to theorize the relationship between bordering and scaling, the paper discusses apt concepts of scale and discusses their relevance, taking Serbia/Kosovo and Ukraine borders as regional examples of how altered resources, yet also constraints, are created by multidimensional rescaling.

CHALLENGING BORDERS: A CRITICAL PERSPECTIVE ON THE RELATION BETWEEN STATE, TERRITORY, CITIZENSHIP AND IDENTITY

Authors: *Anna Casaglia**, University of Eastern Finland, Finland; *Jussi Laine*, Karelian Institute, University of Eastern Finland, Finland

Keywords: border, geopolitic, mobility

Abstract: A nuanced and critical re-reading and understanding of borders as resources and as potential elements of political innovation is needed to interpret the broad socio-political transformations that are taking place in Europe and also more globally. This introductory presentation sets the ground for the session on Challenging borders by shedding light on tensions between national understandings in terms of demarcations based on ethnicity, citizenship, language and socio-cultural characteristics, etc., and broader supranational/transnational understandings which address borders as areas of contact (and, to an extent, transition) between civilizations, religious and cultural spheres. The nature of borders is changing and it is important to understand the complex roles and realities of borders in the 21st Century and thus deal with changing borders and their strategic, economic, cultural implications. Challenging the very concept of a border means to re-discuss the way in which states, territories, citizenship and identity relate to each other. This understanding impacts both theoretical reasoning and methodological approaches to the study of borders and of the processes related to them. The aim of the paper is to define the state of the art and stimulate the discussion, introducing key debates and linking the following presentations.

BRUSSELS AS A CROSS-BORDER METROPOLITAN REGION

Author: *Tim Cassiers**, LISER, Luxembourg

Keywords: Brussels, cross-border cooperation, territorial identity

Abstract: The case of Brussels provides a rather unique setting in which dynamics are at least counter-intuitive. In a world where borders are said to become redundant, the Brussels borders become ever more prominent. Moreover, the territory that is delimited by the Brussels regional borders does in no way coincide with any historical, geographical or socio-economic realities, and in terms of redistributive justice and territorial management, its situation is flawed (Maskens, 2010).

Analysing Brussels metropolitan region from a border perspective adds dimensions hitherto underexplored in readings of Brussels metropolitan governance. Paying attention to the genesis and dynamics of the Brussels regional borders draws our attention to the interplay between territory, identity and sovereignty. This paper explores this in first instance from a historical perspective. For status of Brussels as a region has been the Gordian knot in the unmaking of the Belgian unitary state, resulting in a rather bizarre federal model for Belgium of which superimposed territories and asymmetric competences are the main characteristics.

The creation of a Brussels region was thus a by-product of the tensions between Flemish-speaking and French-speaking identities in Belgium. However, since its creation in 1989, we see the development of a Brussels identity (Nassaux, 2011). Using O'Dowd (2010) account of Mann's sources of infrastructural power, the paper explores then in what way the creation of the Brussels borders resulted in a territorial project, "a set of ongoing actions by which collective actors attempt to institutionalize new sets of norms, values and procedures" (Beverin, 2003: 13).

SLOT2

Chair: *Anna Casaglia* Discussant: *Jussi Laine*

Schedule: Tuesday, 1 September, 10:45–12:30

FROM THE NUMBER TO THE NAME: REVEALING THE LOST IDENTITIES OF THE BORDER

Author: *Anabella Ascensión Cordero Luciano**, UPM, Spain

Keywords: Africa, border, conflicts, ethics, European Cultural Route, European Union, immigrants, landscapes, map, migration, quality of life

Abstract: The following research addresses the conflicts of the European and African border from the human point of view, challenging the border from a critical perspective on the relationship between identities. In order to understand this phenomenon that affects many European countries from the immigrant perspective, which we attempted to disclose the routes and the causes of the African immigration - especially of sub-Saharan countries due to political and socioeconomic problems - and the events which the people are often exposed on their paths to reach European lands. In order to cross the Strait of Gibraltar immigrants are often exposed to the violation of their human rights and indeed objectified by Powers of States and exclusion groups.

Based on the statistics of Migrant Files, more than 24,000 people have died on their way to Europe since 1988 – year when the migratory problems began –, and more than 17,000 have died trying to cross Strait of Gibraltar from Africa until this date. Thousands of them have lost their life and their identities trying to get to the "dream land". The loss of the name is an important fact that relates to the loss of value over a person himself; which makes an analogy to the absence of the category of the human being.

The intention of this investigation within the Landscape Lab framework at the Technical University of Madrid is to find the stories behind the numbers of victims, to reveal the identities behind the number of people that have lost their lives trying to cross European borders, hoping for a better life.

A COMPARATIVE ANALYSIS OF LIFE IN POLISH BORDER TOWNS AT THE EU'S EXTERNAL BORDER

Authors: *Stanisław K. Domaniewski**, University of Eastern Finland, Finland; *Martin Barthel*, University of Eastern Finland, Finland

Border towns are understood in the current literature of border studies as peripheral places. Even so, they are highly influenced by the borders and form a crucial part of border regions dynamics. In the border region values and ideas of the central state are questioned. Depending on the composition of the border region conflicts can emerge, loyalties questioned and the border itself takes on a different meaning than in other parts of the nation state. The Polish border with Russia and Ukraine represents a triple peripherally. The border regions are remote and are located far from their county and national Capitol. Likewise, their location on the EU border puts them on the end of the EU. In this way the everyday life at those borders and the way border towns here deal with their location becomes crucial for establishing interaction with the Russia and Ukraine vis-a-vis the EU. In the paper we will present the case studies of the town of Braniewo, located at the Russian-Polish border and Przemysl, located on the Ukrainian-Polish border region. The paper will examine the patterns of everyday life. The focus will be put on the differences and similarities on the ways locals deal with the borders. Which strategies to cope with location on the border are visible and how is the border perceived? Finally the paper will try to characterize the border towns within Oscar Martinez model of border regions. This analysis will try to offer a better understanding for patterns of conflict or cooperation at the EU external border.

ARMED CONFLICT, IDENTITY AND OUTMIGRATION – UKRAINE BEFORE AND AFTER 2014

Authors: *David Karácsonyi**, Geographical Institute, HAS, Hungary; *Ágnes Erőss*, Geographical Institute RCAES HAS, Hungary; *Áron Kincses*; *Kostyantyn Mezentsev*, Taras Shevchenko National University of Kyiv, United Kingdom

Keywords: armed conflict, identity, migration, Ukraine

Abstract: This presentation summarizes the research carried out in the framework of EASTmig (<http://www.eastmig.mtafi.hu/>) and “Ukrainian citizens in Hungary” projects, focusing on the new migration trends since the armed conflict in Eastern Ukraine in 2014.

The aim of the project “Ukrainian citizens in Hungary” was the introduction of simplified naturalisation of ethnic Hungarians in Transcarpathia (Ukraine). Since 2010, ethnic Hungarian citizens of other countries can apply for Hungarian citizenship if they can prove Hungarian ethnic origin. In this time it was important to ask whether, we could actually speak about “an impending migration wave from the east”. The EASTmig project focused on the recent processes and probable future trends of migration in Visegrad countries and between Belarus, Ukraine, Moldova and Georgia.

We carried out several interviews during 2011 in Ukraine about migration willingness in relation to Hungarian, Ukrainian or Russian ethnicity/identity. During the interviews in Beregovo, Lviv, Kyiv, Kharkiv and Odesa we took in consideration the east-west dichotomy and regional differences inside the country.

The effect of the current conflict on Ukrainian identity and migration willingness is little known. The general circumstances also changed both in case of Russian and Hungarian minorities since 2014. We are going to conduct the interviews again during the spring 2015 to see the changes caused by the conflict and by the shock inside the society due to the war.

BORDERSCAPES: (DE)CONSTRUCTING THE EDGES OF EU

Authors: *Concepcion Lapayese**, CULTURAL LANDSCAPE RESEARCH GROUP (GIPC) . POLYTECHNIC UNIVERSITY OF MADRID (UPM), Spain; *Manuel Gazapo Lapayese**, Cultural Landscape Research Group (GIPC) UPM, Spain

Keywords: (de)constructing, borderscape, cyberspace, map, security

Abstract: From the Cultural Landscape Research Group (GIPC) UPM and from the Laboratory landscape of the Polytechnic University of Madrid investigate about contemporary conflict zones. Borderscapes is a research project about the landscape border, trying to decipher multiple corporeity of these territories. We belong to a global world in conflict, and in this situation seems urgent an awareness, build a glance and margins of interpretation, to thus be able to understand our moment.

We offer within the EUGEO 2015 and within the Challenging Borders Panel P-07, the Borderscape: (de) constructing the edges of the EU project, developed in a complex scenario of full activity right now. We are talking about the process of (de) bordering that is drawn between the South European Union and North Africa, particularly in the Strait of Gibraltar, border and meeting point between two worlds. The research is developed from experience, through the construction of a road map in the Strait, which has allowed us to compare overlapping realities from knowledge, to develop an analysis from various dimensions: from the human till geopolitical, from space till cyberspace, from defense to security.

This project is linked to the line of research proposed in Horizon 2020 EU around the reflective societies and landscapes of conflict, and provides a critical reflection on the process of (de) constructing the edges of the EU.

EUROPEAN NEIGHBOURHOOD AS POLITICAL INNOVATION: EU POLICIES OF CROSS-BORDER COOPERATION AND VISIONS OF A NEW POST-COLD WAR WORLD ORDER

Author: *Ilkka Liikanen**, Karelian Institute, University of Eastern Finland, Finland

Keywords: European neighbourhood, sovereignty, spatial imaginaries, world order

Abstract: My paper analyses changing key-concepts and spatial imaginaries of EU documents of CBC and external relations in the context of the discussion on new post- Cold War international order. Special attention is paid to the shifts in political vocabulary of the European Neighbourhood Policies between the Wider Europe document (2003) and the present-day lineations

of Eastern Partnership Policies. The aim of the study is to identify political innovation in the ways of conceptualizing sovereignty and defining Europe and European neighbourhood.

By examining the coexistence and clash of diverse sovereignty concepts and spatial imaginaries of EU CBC and security policies, the paper strives to critically comment on and to contribute to the broader discussion on the role of the EU as a new kind of international actor. The main focus of the study is on the implications of novel sovereignty concepts and spatial imaginaries for the process of the shaping of EU common foreign and security policies. The paper asks how the sovereignty challenging spatial imaginaries of the Wider Europe document of the year 2003 have worked as political innovation and to what degree they are still valid part of EU common foreign and security policies.

SLOT3

Chair: *Anna Casaglia* Discussant: *Jussi Laine*

Schedule: Tuesday, 1 September, 15:00–16:45

THE POLITICS OF SCALE IN THE EU TRANS-BORDER REVITALIZATION PROJECTS

Author: *Siarhei Liubimau**, European Humanities University, Lithuania

Keywords: architecture, border, cross-border cooperation, Europeanization

Abstract: The case study of revitalization of the Neisse suburb on the Polish side of the German-Polish border town Goerlitz-Zgorzelec is used here in order to discuss the role of built environment in the process of Europeanization. Basing on this case study proposed paper identifies the phenomenon of “architecture of Europeanization”, which articulates the EU scalar regime on the urban scale. The first aspect of this phenomenon’s meaning is about the realization of the EU political and economic goals by spatial planning. It includes projects like bridges, roads, surveillance equipment, recreation zones etc., which in both social and spatial terms adjust trans-border relations and, thus adjust and reconfirm a specific scalar regime. In the second aspect, “architecture of Europeanization” is the built environment, which becomes the locus of scalar shifts and struggles emerging from the changing border regime. These scalar shifts and struggles materialize in place-specific trans-border uses of the built environment. This way “architecture of Europeanization” complicates or even challenges the existent scalar regime. This paper is based on the empirical material gathered as a result of qualitative interviews with actors involved in spatial planning and cultural trans-border cooperation projects crucial for the analysed area and of fieldwork conducted in Goerlitz-Zgorzelec (between 2007 and 2009).

BORDERS: HISTORICITY OF SPACE/TERRITORIALITY OF TIME

Author: *Gyula Ocskay**, CESCO, Hungary

Keywords: borders, historicity, spatialty, temporality, territorial identity, territory

Abstract: In my presentation, I will consider borders as temporal representations of space or in other words as spatial representations of time.

My starting point is the definition how Heidegger’s term of ‘Historicity’ (Geschichtlichkeit) describes the existential relation between the Being and Time. An object in a museum is interesting for visitors because of an existential relationship the object had with another Being / Existence / Dasein in time. In the second part of my presentation I will touch upon the evolution how History as Providence has replaced by subjective history (history inside) defining the identity of human beings. From this point of view, borders (as boundaries defining our identity) make visible our temporality / historicity in space.

Second point of my presentation is given by the statement and justification that borders are creatures of time: their birth, metamorphoses, life-history and „death” are fundamentally interwoven by temporality. Consequently, borders can be interpreted as not-self-evident and not-perennial marks of time in space. Capricious history removes and abolish borders and creates new ones. From this point of view, borders are representations of time on the maps.

In my closing remarks, I will touch upon the new experience of space in a global world where identity is no longer lanced by state borders. This novelty changes our concept on space and boundaries. However, Being as a being in time cannot be freed from bordered world, because borders are fundamentally connected to Historicity.

THE DE-BORDERING PROCESS OVER THE LANDSCAPES. A LAND USE AND COVER ANALYSIS OF A PYRENEAN BORDER REGION: THE CENTRAL AREA OF THE CROSS-BORDER CATALAN SPACE

Author: *Roser Pastor Sabert**, University of Girona, Spain

Keywords: cross-border cooperation, cross-border planning, landscape planning, landscapes, openness of borders, spatial planning

Abstract: The presence of a boundary implies the juxtaposition between two different political and cultural systems and defines the limits of the countries landscape policies and spatial planning actions. The boundary determines the differences on either side of the border that are reflected in the landscape. This in turn, creates territories with dual landscape evolution despite being a single geographical unit. The landscape is an expression of the dynamics between natural and cultural influences of the territory, and its appearance reflects the social, political and economic changes experienced by a country over the time. As consequence, the landscape also shows how the process of opening border in Europe has affected the border regions.

In this research we compare the landscape evolution – using the land use and cover database- of each side of the border for one border landscape located at the eastern end of the Franco – Spanish border: the central area of the Cross-border Catalan Space.

This paper aims to highlight the direct involvement in the landscape dynamics affected by two political and socio-cultural systems where the consequence is the existence of two landscape models based on their individual management, spatial planning and protection

rights. We point out how the landscape dynamics have been affected and transformed by the progressive loss of functions of the Franco-Spanish border after the entry of Spain into the EU and during the development of the globalisation process.

The methodology is based on the interrelation between the analysis of the landscape patterns during the last sixty years and the historical evolution of the spatial planning from the local to the European scale and the EU cross-border cooperation policy.

TERRITORY: A VERY BORDERED CONCEPT

Author: *Márton Pete**, Eötvös Loránd University, Budapest, Hungary

Keywords: border, borderlands studies, political-territorial control, state power, territory

Abstract: The boost experienced in the number and the multiplicity of scientific performance in border studies during the last decades have already provided with some new ways of thinking to better understand the lines that separate us. It is in line with the common assumption of scholars suggesting that the meaning of borders for societies and their members is much more complex than ever before.

The rise of border studies benefits more and more from interdisciplinary thinking. A wide range of humanities and social sciences has already contributed to the advancement of this field, both in theoretical and methodological terms. An invaluable contribution of this interdisciplinarity is the further evolution of basic notions and concepts.

In this paper I intend to focus on the concept of “territory”, primarily based on the recent definition and argumentation introduced by Stuart Elden (Elden 2010). It appears that territory is an issue of primal importance in the survival and reproduction of borders, as these spaces of state powers would otherwise be meaningless without clear demarcation. If so, it is unclear to what extent can emerging European cross-border interactions on supra- and substate levels achieve their goals. That is the point that I shall investigate through the critical review of a range of EU policy papers.

BORDERS AS NEGATIVE FREEDOM? ETHICAL DILEMMAS OF BOUNDING SOCIAL SPACE

Author: *James W Scott**, University of Eastern Finland, Finland

Keywords: borders, ethics

Abstract: Borders and bounding have frequently been characterised as retrograde phenomena and reflections of highly asymmetric and exploitative power relations within human societies. This stable motif of critical geography is also steeped in ethical debates that question borders insofar as they signify social exclusion, reactionary localism and a false social consciousness. However, there appear to be few feasible alternatives to liberal notions of an “exclusive” but self-defined community as a necessary precondition of local democracy (see Batt 2002). Hence, a major challenge to liberal democracy is the democratic governance of its borders and openness to cultural difference. This paper will review ethical debates in border studies and trace their philosophical underpinnings. One question that arises is the extent to which the European Union, despite its contradictions and the selective permeability of its borders, might provide scenarios of democratic forms of border governance and regulation. An alternative to dichotomisations of the border based on “inclusion” and “exclusion” - which in many ways influence current public debate - is to think beyond the border complex as such and to comprehend the border as a product of multilevel tensions within European (and global) society

SLOT4

Chair: *Anna Casaglia* Discussant: *Jussi Laine*

Schedule: Tuesday, 1 September, 17:15–19:00

IS IT POSSIBLE TO DECOLONISE THE BORDER? AN ESSAY ON THE EPISTEMOLOGY OF COLONIALITY AT INTERSTATE BORDERS

Author: *Gianluca Simi**, University of Nottingham, United Kingdom

Keywords: border, geographical epistemology, nationality, postcolonialism

Abstract: The idea that interstate borders are the mere result of existing cultural differences has been extensively criticised within border studies and border theory, especially for overlooking the role of power relations in determining what differences are fundamental for the establishment of states. Such an idea, however, has never been fully applicable to postcolonial societies and states, whose borders, for the most part, were demarcated prior to the acknowledgement, or even the existence, of any essential cultural differences, in a process which was permeated by the experience of coloniality. Therefore emerges the need for a theoretical effort to understand the legacy of colonialism in post-nominal-independence endeavours to draw borders and to subsequently create grand national narratives that could sustain the existence of such states based on the same grounds of a presumably-homogeneous content along whose peripheries appear transitional spaces between essential units marked by the border. My intention is, thus, to explore the conjectural possibility of the decolonisation of the border, primarily inspired by Walter Mignolo's idea of border thinking, whereby borders no longer represent the peripheral zones between entities within which state power and culture are assumed to overlap but, rather, provide a new approach for understanding postcolonial societies by departing from the division lines in order to analyse and, in certain aspects, overcome the founding schisms upon which colonial epistemologies divided the world into incompatible and hierarchical extremes.

TERRITORIES, PLACES AND SCALES IN MOTION. CIVIL SOCIETY INITIATIVES ALONG THE POLISH-GERMAN BORDER

Author: *Nicolai Teufel**, University of Bayreuth, Germany

Keywords: border, civil society, cross-border cooperation, Germany, Poland

Abstract: The term “borderwork” (Rumford 2009) describes the ability of ordinary people to shift, perpetuate or erase borders, which has often been neglected in more state-centered analyses of processes of re- and de-bordering within political geography. Building upon the TPSN-Scheme introduced by Jessop et al. (2008), my talk is intended to render the idea of borderwork more precise, and opts for a multidimensional perspective. It therefore emphasizes the intersections between territory, place, scale and network, questioning the privileging of any single perspective within geography and border studies.

Based upon these conceptual reflections my contribution establishes a comparative perspective on border-crossing civil society initiatives in the fields of culture, leisure and education in the Polish-German twin towns of Zgorzelec/Görlitz, Gubin/Guben and Ślubice/Frankfurt (Oder). These towns were divided after World War II and have once again received political attention following the eastward enlargement of the European Union. These initiatives can be described as powerful actors, due to their strategic position in transnational networks (Nugent 2012). Therefore analyzing such projects provides a powerful heuristic with which to demonstrate the diverse understandings of the border, which become nested in the border region. These range from the conflicting interests of socio-cultural and political actors to the ambivalent concurrence of the EU-paradigm of “growing together” and ongoing national divisions.

BORDER AS PROBLEMS. BUT FOR WHOM?

Author: *Ivana Venier**, Croatia

Keywords: everyday social practices, learning devices, state sovereignty, time and opportunity, unintended consequences

Abstract: Borders are usually associated with something negative. They tend to be perceived as problems, as something that we need to solve or even get rid of. Most often, borders are described as obstacles to free movement of people and goods, as artificial lines, as creators of conflicts, disparities or rivalry. A wide literature and the media support this view, while specific EU policies and programmes are conceived to reduce borders' unfavorable character.

However, this kind of representations can hide many aspects of borders and border areas, as the fact that they are needed for democracy to limit power (Gaeta, 2011), or for people to make sense of space (Simmel, 1908), or that they were helpful to reduce wars (Schmitt, 1950).

Problems are the result of the knowledge that we use to construct them (Lindblom, 1990). Thus, through this paper I would like to draw the attention on different ways of perceiving and conceiving borders. Drawing from various sources (philosophy, arts or literature) and from the observation of everyday citizens' practices, I will focus on the many different - and sometimes inconsistent - meanings that can be assigned to borders.

Drawing mostly from former Yugoslavia examples, the objective will be to reflect on the unintended consequences put in place by everyday practices along borders, that can challenge their rigid character, the assumption that they are clear demarcating lines or the idea that they are problems.

Actually, borders can serve as learning devices. More than creating disparities, they create differences to learn from.

TRANSFORMING BORDERS IN THE WESTERN BALKANS – METHODOLOGY CONCEPT FOR RESEARCH IN POST-CONFLICT BORDERLANDS

Author: *Marta Zorko**, University of Zagreb, Faculty of political science, Croatia

Keywords: border communities, bordering, borders, Croatia

Abstract: The research covers the northern part of Western Balkans region, namely the borderlands between the Republic of Croatia and its neighbors, the Republic of Serbia, and Bosnia and Herzegovina. Twenty years ago these borderlands did not exist outside individual mind-sets and historical narratives, and were part of the inner borders of the Socialist Federal Republic of Yugoslavia, but became important during the Yugoslav wars in 1990's. Those borderlands were contested in all sorts of political projects during the conflict. After the dissolution of Yugoslavia, local people were divided by international borders between new sovereign states. Local population was interconnected and questions of nationality and minority rights were raised. Economic mobility was limited as the new borders introduced barriers to trade, employment, and investment. Through the process of Europeanization and the accession of Croatia to the European Union these borderlands became the periphery of a bigger political community, thus imposing new perceived differences and daily security issues that divide local populations even more. However, we believe that local borderland communities, defined by common local identities and cross-border cooperation, exist regardless of national or ethnic principles and successfully adapt to the processes of border transformation. This paper will introduce methodology concept for research in this specific post-conflict borderlands and define areas of cross-border communication and local identity identification. A critical perspective on the relation between state, territory, citizenship and identity will be included in this case study oriented paper with wider possibility for further implementation while addressing effects of the Europeanization process.

Organizers: *Sándor Illés, Gábor Michalkó, Dallen J. Timothy*

Location: Room K

Chair: *Dallen J. Timothy*

Schedule: Monday, 31 August, 13:00–14:45

EMERGING FORMS, SPATIAL AND SOCIAL ASPECTS OF NETWORKED MOBILITY

Author: *Dóra Bálint**, University of Pécs, Hungary

Keywords: networked mobility, sharing economy

Abstract: The emerging globalisation and the post-industrial development influences not only the markets, but all other subsystems of society as well. New trends in transport like carsharing occur in the frame of the network society and change the patterns of mobility. This type of alternative transportation spreads from the United States worldwide and its original aim was to reduce air pollution and traffic jams, creating a more sustainable mobility. By now it is spread among the most developed countries and shows a flourishing example of sharing economy, an internet-based peer-to-peer model which doesn't require a service provider. The main focus of this empirical research is the penetration of this innovation among Hungarian citizens. Which social groups are the most active users of car sharing? What social and geographical impact could cause this way of transportation? The research may reveal the weaknesses of domestic public transport system and the spatial concentration of the users. On the other hand we can get to know about the main motivation of using telecars in this region. Mapping the users of this peer-to-peer service also allows us to compare the pattern to results of former researches in field of diffusion of innovations.

THE CHALLENGE OF DIVERSITY THROUGH MIGRATION: THE CASE OF SAXONY

Author: *Birgit Glorius**, Chemnitz University of Technology, Germany

Keywords: ethnic conflict, migration, uneven development

Abstract: Migration has severely changed the population structure and social fabric of many regions in Europe. Especially in recent years, many urban but also peripheral, rural regions in Europe experience increasing population diversity due to the inflow of labor migrants and refugees. Contrary to urban agglomerations, rural communities often have no experience with diversity, especially in the East German regions like Saxony, where migration during socialist times mainly occurred as highly segregated temporary labor migration. Considering the huge population losses due to internal migration after 1989/90, recent population gains through immigration should have positive connotations in East German peripheries, as they provide an opportunity to improve the age structure towards economically active age groups and recruit highly qualified labor force. But in a society that is not experienced in dealing with immigrants, there are many prejudices and fears concerning diversity. Currently those fears culminate in large demonstrations denouncing the islamisation of Europe. The proposed paper analyzes how the migrations of the past decades have changed the population structure of urban and rural regions in Saxony, showing how the international migrants contribute to the demographic stabilization and participate in the labor market. Using selected case studies, the problem of social acceptance and possibilities to overcome xenophobia are discussed. In the outlook, the paper will generalize its findings and unfold the interfaces between immigration, integration and social resistance in a regionalized perspective. The paper draws on statistical material and several case studies which the author carried out in different regions of Saxony.

CHANGING RURAL MIGRATION PATTERNS AFTER THE POLITICAL AND ECONOMIC TRANSITION IN THE VISEGRÁD COUNTRIES

Author: *József Lennert**, MTA KRTK RKI, Hungary

Keywords: counterurbanisation, rural areas, suburbanization, temporal distance, Visegrad Group

Abstract: The nineteen-seventies marked a turnaround in the rural migration patterns and the beginning of counterurbanisation in the United States and many Western European countries. However, in the countries of the Visegrád Group, because of their lagging development and the interventions of the socialist regimes, preceding stages of the urbanisation process remained dominant until the political and economic transition. After the transition, not counterurbanisation, but suburbanisation emerged as the most noticeable rural migration process. Moreover, remote rural areas not only became a possible destination for migrants seeking natural amenities but also for low-class people losing their livelihood in the urban areas after the economic transition.

The aim of my research is to examine the extent of migration turnaround in the rural areas of the Visegrád countries, with a focus on the differences between central and peripheral areas, described by the temporal distance of large and middle-sized cities. Firstly I selected the local administrative units (Lau-2) which can be considered rural. I analysed the correlation between migration balance and temporal distance of large and middle-sized cities in five categories: capital cities, cities with more than 400 000 inhabitants (only in Poland), cities with more than 100 000 inhabitants, cities with more than 50 000 inhabitants and cities with more than 30 000 inhabitants. The overall migration balance of the distinguished rural units turned to positive after the economic transition, but the results showed that distance from the urban centres still play a key role in the ability of the rural settlements to attract and sustain population.

HUMAN MOBILITY AND INFORMATION TECHNOLOGY, A MORE AND MORE INTEGRATED CAUSE AND EFFECT PHENOMENON

Author: *Armando Montanari**, Sapienza Rome University, Italy

Keywords: financial flows, Information, international migration, knowledge production, mobilities of knowledge, social innovation, tourist movement

Abstract: The concept of human mobility has been developed in the social sciences during the Nineties. In 2000, the definition has had its specific recognition in geographical disciplines with the activation of a specific Commission (Globility, Global Change and Human Mobility) of the International Geographical Union. Over the last fifteen years, the phenomenon has become increasingly evident even though the research and publications are perhaps left behind compared to the speed of the phenomenon. Studies on human mobility focus on the movement of people, but it is increasingly clear that the phenomenon is the result of evolution and diffusion of ICT. Through the combination of human mobility and ICT has also established the connection of financial flows, economic ones and information that have become part of a complex system of synergies which will determine the development of the next decades. The paper contributes to determine how the human mobility has changed, in the phenomena and in the studies, since 2000, when geographers of all the world have begun to exchange regularly their experiences during the annual meetings of Globility.

The reflection on the studies and research of the recent past will help us understand how the phenomenon will grow in the coming decades and which will be the commitments that will be required to geography. Particularly useful in this context will be to follow the younger generation human mobility which reflect cultures and behaviours that are likely to be replicated in the next half century.

CHANGING HUMAN MOBILITY OF THE EAST-CENTRAL EUROPEAN POOR STRATA WITH SPECIAL REGARD TO THE ROMA

Authors: *István Süli-Zakar*, University of Debrecen, Department of Social Geography and Regional Development Planning, Hungary; *Mihály Tömöri**, Institute of Tourism and Geography, College of Nyíregyháza, Hungary

Keywords: East-Central European poor strata, migration, minority issues, poverty

Abstract: In the post-communist countries of East-Central Europe the regime change and the transition to post-industrial societies occurred virtually at the same time. The combined effects of the two processes resulted in numerous negative social and economic effects. The regime change, together with privatization, quickly revealed the problem of the hidden “inside-gate unemployment” of the former communist era. However, the fight against unemployment proved to be especially hard in the midst of altered circumstances. This can primarily be due to the fact that the low qualified masses, who were formerly employed as semi-skilled workers, were unable to integrate into the system of post-industrial production, which was based on the IT revolution (robotics, automation). As a result, the reintegration of the unemployed masses into the business sector became especially hard, and led to the creation of the “new poverty”. These problems occurred even more pronouncedly among the East-Central European Roma who are still undergoing a demographic boom, generally characterized by lower level of education and a distinct culture and subject to racial prejudice. As a consequence, following the European integration of transition countries (2004, 2007), the volume of migration from these countries to more prosperous Western-European countries increased significantly. This process as well as with the recent economic crisis (2008-2009) generated socio-economic tensions in Western Europe, and met with strong resistance from national governments (deportations of Roma migrants, attempts to restrict the free movement of labour within the EU), while the European Union has been unable to find an effective response to these problems.

RESIDENTIAL DIFFERENTIATION AND MOBILITY IN POST-SOVIET CITY: THE CASE OF RIGA, LATVIA

Author: *Baiba Svane**, Faculty of Geography and Earth Sciences, University of Latvia, Latvia

Keywords: mobility, Post-Soviet city, residential differentiation, Riga

Abstract: The economic and social restructuring in Central and Eastern European cities since 1990s is producing socio-spatial differences. In post-Socialist cities residential mobility has been considered as a major process of adjustment, where explaining factor could be differences in social structure (Ruoppila, 2006). Significant feature of post-socialist cities is high share of owner occupied housing (Kovacs, Herfert, 2011). In the last decades size of population in Riga have decreased thereby have increased share of residents living in large housing estate neighborhoods (Krišjāne, Bērziņš, 2014). This paper investigates socio-spatial differentiation in Riga over the last decade and residential mobility patterns between neighborhoods using an empirical evidence. The aim of research is to evaluate socio-spatial differentiation and residential mobility patterns in Riga city. The changes of socio-spatial differences over the last decade were analyzed using Population Census Data from years 2000 and 2011. Socio-spatial differences between neighborhoods and mobility patterns were analyzed using resident survey carried out in year 2012 and 2013. Empirical data shows that since 1990s half of actual living residents of Riga have moved. 72% of population live in soviet time built estates. Moreover 92% of residents live in housing estates. Over the last decade have increased share of owner-occupied estates by 50.6 (2000) to 65.6% (2011). The author concludes that population of Riga is on adjustment process where residential mobility takes place.

MIGRATION OF HIGHLY SKILLED WOMEN FROM SUB-SAHARAN AFRICA TO EUROPE: FLOWS, STRATEGIES AND SOCIAL REMITTANCES.

Author: *Camilla Spadavecchia**, Università di Genova, Italy

Keywords: cultural environment, gender, minority issues

Abstract: Gender inequality is a powerful barrier to economic, social and political progress and at the same time can be an important push factor for accessing migration, particularly when women have economic, political and social expectations which real opportunities at home do not meet (Martin, 2007). This is the case of many African highly skilled women that migrate to Europe to improve their education and become more independents. At present both the international institutions and the literature starts to address their interest to them because of their potential skills transfer to the origin communities.

The main goal is to widen the known profile of Sub-Saharan highly skilled women in Europe who, in the literature, are seen mainly just as nurses. Other goals are the acknowledgment of their migratory strategies and of their role in economic and social remittance scenario (Levitt, Lamba Nieves 1998-2011). The study conducted from a social geography perspective, but with interdisciplinary incursions, is based on two different approaches: Time Geography (Hägerstrand, 1970 - Lenntorp 2004) and Life Course Approach (Elder, Glen and Giele, 1985-1998). Is mixed qualitative and quantitative and used both a questionnaire and a semi structured interviews to African highly skilled women living in Europe. The results shows that the Sub-Saharan highly skilled women who lives in Europe are young, belongs especially from Central and West African Countries, studies and works in economic field, resides mainly France, UK, Netherland and Belgium and are satisfied about job and career. Migrate in more than one Country, shows a strong ties with home and present communities and are involved in development projects especially related to women and to education.

THE EFFECTS OF ECONOMIC CRISIS ON THE INTERNATIONAL CIRCULAR IMMIGRATION RELATED TO HUNGARY

Authors: *Sándor Illés**, Active Society Foundation, Hungary; *Áron Kincses*

Keywords: circulation, crisis, Hungary, international migration, spatial and demographic distribution

Abstract: This contribution provides empirical evidence relevant to the long-term international circular migrants admitted into Hungary in crisis period between 2009-2012. The principal aim of this research is to quantify the effects of economic crisis on the international circular migration in comparison with before crisis period of 2006-2008. Initially, we define the circulation within the conceptual framework of transnationalism from statistical point of view. Secondly, we create macro-scale data on long term international circular migrants based on the same original statistical method than before crises period. in the light of result we study changes in the statistical, demographic and spatial patterns associated with international circulation and circulars, too. Thirdly, we explore the volume of circulation in the context of international immigration of foreigners. Fourthly, we seek to gain further insight into the demographic composition of international circular immigrants by gender, age, family status. Lastly, based on the country of citizenship in one hand we study external spatial dimension of circulation. On the other hand, with the help of place of residence in Hungary we map the internal spatial dimension of circulation. Conclusions indicate the need for future research.

SHIFTING MIGRATION SYSTEM: LATVIAN MIGRANTS IN GERMANY

Authors: *Zaiga Krisjane**, University of Latvia, Latvia; *Daniel Goeler, Andreas Winkler*, Otto-Friedrich University, Bamberg, Germany

Keywords: economic crisis, Germany, Latvia, migration

Abstract: This paper analyses different aspects of the shifting migration system of Latvia with special reference to immigration to Germany. Main research questions focus on group-related and spatiotemporal variability and changes. Germany is one of the main destination countries for Latvian migrants. The number of Latvian citizens living in Germany is still small, but growing. Out-migration from Latvia is triggered by endogenous and exogenous changes in times of transition, EU-accession and the recent global economic crisis. Against this background, individual problems like unemployment, financial problems or debts hasten emigration. Latvian migration is highly volatile: Today, Germany is becoming a more and more attractive destination for Latvian migrants. The analysis is based on data from official statistics as well as an own online survey. Unique data set results allowed describing profiles of migrants from Latvia and main emigration motives. Following the concept of liquid migration the findings point out that Latvian migration shows elements of continuity, as well as, reflecting liquidity, those of pluralism and fragmentation.

THE NEW EXPERIENCES OF METHODOLOGY AND FIELDWORK IN RESEARCH OF MIGRATION PROCESSES IN HUNGARY

Authors: *Beáta Szilasi Siskáné**, University of Miskolc, Hungary; *Tibor Kóródi*

Keywords: empirical methodology, field survey, migration

Abstract: In recent years, the increasing international migration and the problems associated with it are growing. It is well known that our country is also involved in this theme; in recent years more and more people leave Hungary to try their luck abroad. Unfortunately there are no precise data on this, especially based on future trends assessing. In our research, we tried to get information

which can determine the Hungarian migration intention. We wanted to know which social groups are most affected by emigration and we were curious to see if there are regional differences, what the reasons are. The empirical research aims two sample groups, one of them was the students from the universities and the other was people between 18-80 ages in the largest cities of Hungary. During the survey we also measure subjective quality of life factors, like happiness and satisfaction which may influence the migration intentions. Respondent also can reply which are the most important attractive factors of the target country, and which are the most important repulsive factors of Hungary. We have an online questioner and we have made many queries with interviewers in the cities. Data processes by SPSS. In this presentation we would like to focus on the methodology and the field survey of this research.

THE ROLE OF GUEST-CARDS IN DEVELOPING "SLOW TOURISM" IN AUSTRIA AND HUNGARY

Authors: *Márta Bakucz; András Bozóti**, PTE-KTK, KRTI, Hungary

Keywords: guest card, tourism marketing, sustainable tourism, slow tourism, touristic destination

Abstract: The aim of our paper is to assess the impact of guest-cards on the sales performance of medicinal and thermal tourism services, and to this end we examine selected tourist regions in Hungary and Austria.

The authors attempt to show Austrian 'best practice' in introducing and using such cards, in contrast to Hungary, where there is currently (in the outstanding holiday region of Lake Balaton) only one isolated attempt to emulate this. We strongly recommend expanding the use of this type of discount card as a means to reduce spatial differences and to increase the potential of tourism in the destinations involved.

LOCAL PERCEPTIONS AND ATTITUDES TOWARDS TOURISM: HUNGARIAN CASE STUDIES

Authors: *Mónika Jónás-Berki**, University of Pécs, Hungary; *Krisztina Buzsik*, University of Pécs, Faculty of Sciences, Hungary; *Ádám Köbli*, University of Pécs, Hungary; *Júlia Papp*, University of Pécs, Hungary

Keywords: attitude, local people, tourism

Abstract: The local authorities are an important part of the tourism environment, they play an emphasised role in tourism. Firstly they are an active part of the destination's character, and secondly tourists are able to discover the destination through locals, who thereby play a direct part in the travel experience. The local people's attitude to tourists, and their acceptance of them, can provide the foundation of the destination's success. The locals attitude towards and expectations of tourism are influenced by several factors. These include the proportion of locals to tourists, the tourism sector's role in the economy, and last but not least the local people's involvement in the tourist industry. We examine the operation and interaction of these factors in three different destinations where the common is the importance of tourism to the local economy. Hévíz is a world famous destination, where the main attraction is the thermal lake and the medicinal properties of the water. The large number of foreign tourists is significant for the life and economy of the town. Orfű has a different profile; here the main clientele are families who come for recreational activities. Thus in this area we find a large number of weekend houses, and also that people from nearby cities move there for the rural environment. It is very difficult to reach Kisújbánya, so it would not be able to sustain higher volumes of tourism. Most of the houses are weekend houses, and hikers are the other main category of visitor.

SLOT3

Chair: *Barbara Staniscia*

Schedule: Monday, 31 August, 17:15–19:00

RECREATIONAL AND TOURISM-PURPOSE MOBILITY ALONG BORDER REGIONS: THE SOUTH TRANS-DANUBIAN (HUNGARY) CASE

Authors: *János Csapó**, University of Pécs, Faculty of Sciences, Institute of Geography, Hungary; *Antal Aubert; Géza Szabó*

Keywords: innovative tourism product development, mobility, recreation, South Transdanubian region

Abstract: It is a well-known phenomenon in human geography that cross border geographical allocation can either be positive or negative, connecting (convergence) the two (or more) areas or disconnecting (divergence) them. In general, the main aim of cross-border cooperation is reducing the negative effects of borders as administrative, legal and physical barriers, furthermore tackle common issues and offer solutions.

The most important apropos of this paper is that after the 2007-2013 planning period of the EU it is time to summarize and evaluate the recreational and tourism purpose types of mobility in the South Transdanubian region through innovative tourism product development in which the authors took part for years and in several projects in such topics as greenways, ecotourism development or eco lodge network creation.

Through the highlighted examples in our presentation and paper we will intend to find the answer for the above mentioned question: how successful these programmes or projects were or can be in the future in terms of strengthening cross border cooperation.

THE ROLE OF TOURIST EXPERIENCE IN HUNGARY'S DOMESTIC VFR TRAVELS

Authors: *Anita Zátóri**, Corvinus University of Budapest, Hungary; *Dániel Balizs*, Geographical Institute, Research Centre for Astronomy and Earth Sciences, HAS, Hungary; *Noémi Kulcsár*; *Gábor Michalkó*, Geographical Institute, HAS, Hungary; *Judit T. Nagy*

Keywords: experience, Hungary, tourism, VFR

Abstract: Visiting friends and relatives (VFR) is the main drive of domestic travels in most of the countries. The Central Statistical Office in Hungary collects data about travel behavior of local residents since 2004, which helps to outline some specifics of the Hungarian VFR travel and tourism. Our previous study exploring Hungary's transparent tourism pointed out that travellers with VFR motivation are visiting tourist attractions in the destination, too, and consuming services designed for touristic needs, which leads to a finding that they are partly behaving as tourists. However, there is little known about the means of VFR experience and the extent to which this experience is perceived as a tourist experience.

Based on a survey (N=896) focusing on domestic VFR travellers' tourist behavior, the aim is to describe and discuss to what extent can be VFR experience viewed as tourist experience, and what are the factors which strengthen the relation between VFR and tourist experience. It was found, that those visiting friends (VF), staying for longer, and participating touristic like activities obtain tourist experience with a higher chance, than those visiting relatives (VR), staying for shorter time, and being rather passive during the visit.

BACK TO BACK, OR SHAKING HANDS? POST-ENLARGEMENT CROSS-BORDER LABOUR MOBILITY IN THE BORDER TRIANGLE GERMANY-POLAND-CZECH REPUBLIC

Authors: *Robert Nadler**, Leibniz Institute for Regional Geography, Germany; *Annedore Bergfeld*

Keywords: cross-border cooperation, labour market, migration, mobility studies

Abstract: Germany's Eastern border regions could be characterized as peripheral and rural areas that diverge in terms of territorial development from Germany's prosperous regions. The EU accession of Poland and the Czech Republic in 2004, and the subsequent introduction of free movement of labour in 2011, gave hope to these regions that the EU integration could support a repositioning as central area in the enlarged Europe. This hope is in line with the EU's Territorial Cohesion Policy which aims at convergence and balancing of territorial development. Regional stakeholders in Germany expected that actors formerly standing back to back would quickly turn around and shake hands across borders.

Using an in-depth case study of the EURES-TriRegio, located in the border triangle between Germany, Poland and The Czech Republic, we will challenge the common understanding of a free movement of labour as driver of cross-border regions' integration and convergence. Examining statistical data, we will show that cross-border labour mobility has not increased as strong as expected. Based on interviews with labour market experts and local policy makers in all three parts of the border region, we will highlight barriers for regional cross-border integration. Finally, we will reflect the findings in the light of Martinez' (1994) Model of Borderland Interactions and the developments at Germany's Western borders.

A CALL FOR NEW TRANSPORT GEOGRAPHIES IN HUNGARY – THE CASE STUDY OF THE GENDERIZATION OF HUNGARIAN AUTOMOBILITY

Author: *Botond Palaczkai**, Hungary

Keywords: automobility, car culture, cultural geography, gender, mobility studies, transport geography

Abstract: The international trends in human geography – and other social sciences – have experienced many „turns” in the past few decades, one of the most recent is the so-called „mobility turn”. Although from the perspective of post-socialist Hungarian geography the contexts of these turns might seem relatively distant, transport would have deserved much wider attention from the discipline than it received. Without a well-developed local tradition and without engaging with contemporary trends in social sciences to draw attention, the geographical studies of transport in Hungary has little to offer to emerging social research, therefore the field seems to be rather marginalised. To counter these odds, this paper will posit a theoretical framework to approach the subject from a new direction, linking it to the tradition of cultural geography and mobility studies. As an empirical contribution, this paper will present the findings of a discourse analysis of various Hungarian media releases (music, books, movies and TV shows), focusing on the genderization of automobility in post-WWII Hungary. The paper will argue that Hungarian automobility is situated in a distinct, local idea of modernity defined by its specific socio-cultural context, and that the socialist and post-socialist regimes played a crucial part in the production (or reproduction) of gendered structures of automobility.

MOBILIZING BOUNDARIES: TOURISM AS A STIMULUS FOR TRANSFORMING FORMS AND FUNCTIONS OF INTERNATIONAL BORDERS

Author: *Dallen J. Timothy**, Arizona State University, United States

Keywords: borders, geopolitic, tourism space

Abstract: This paper examines how tourism as a global socio-economic phenomenon has been powerful enough to challenge absolute state sovereignty by creating the need for international borders and their legal forms and functions to be altered and transformed. The relationships between borders and tourism have long been classified quite directly as borders as tourist attractions/destinations, borders as barriers to travel, borders as zones of transit, and borders as modifiers of the tourism landscape. While all four of these relationships still hold true, a new relationship has also been identified recently by the author, and that is tourism as a modifier of the border landscape and also of the legal boundary itself. Based upon extensive field work and case study-

based research methods, this paper provides empirical evidence of this unique and still somewhat uncommon relationship between borders and tourism from the French-Andorran and US-Mexican borders to illustrate not only the mobilities of people who cross international frontiers but also how those international boundaries themselves become mobilized as living, mobile and transformative geopolitical organisms.

RECRUITMENT INFORMATION FOR OVERSEAS WORKING JAPANESE IN GERMANY: ACTIVITIES OF RECRUITMENT AGENCIES

Author: *Yoshimichi Yui**, Hiroshima University, Japan

Keywords: Germany, Japan, migration, recruitment agency

Abstract: The economic globalization will push up the international workforce mobility. Skilled international migration is fundamental globalization process in the “space of flows” of network society. And skilled professional and managerial elite need their assistants and support persons. Therefore globalization induces plenty of international migration containing both skilled professional workers and their supports persons which contains subordinates and locally locally-hired employee. Recently, the number of Japanese working abroad is increasing. Especially, Japanese young women's working abroad is more than men. Already, we researched the Japanese working women in Singapore, Bangkok, San Francisco and Shanghai. The needs of office procedures, service sectors, sales and customer service in Japanese overseas companies are increasing and diversified in order to support Japanese expatriates. Therefore these supporting procedures in Japanese companies in each country are required for Japanese women as local employees. Furthermore, Japanese companies switch from expatriates to people hired locally, in order to reduce personnel expenses after the Lehman Shock. Then many Japanese companies depend on recruitment agencies in recruiting Japanese employees.

In this study, we research activities of recruitment agencies which recruit Japanese hired locally in Düsseldorf, Germany. Because we researched in Düsseldorf, there are over 500 Japanese companies and there is the biggest Japanese community in Europe. We also clarify the characteristics of Japanese human resources by using recruitment data for Japanese job seekers. Recruitment agencies consult with job seekers on their career path. Their activities are important for job seekers and also for Japanese companies.

SLOT4

Chair: *Sándor Illés*

Schedule: Tuesday, 1 September, 08:30–10:15

SPATIAL MOBILITY AND ACCESSABILITY OF EDUCATION IN COUNTRYSIDE: YOUTH'S SCHOOL TRAVEL IN RURAL LATVIA

Authors: *Ģirts Burgmanis**, University of Latvia, Faculty of Geography and Earth Sciences, Latvia; *Iveta Sprōģe*

Keywords: accesability, rural areas, spatial mobility, youth,

Abstract: Recent studies address the accessibility as indicator of social exclusion through the context of travel behaviour and opportunities to access services depending on various physical and socio-demographic factors. Education is one of the most important services affecting the development of people and determining equal participation in life. Hence the accessibility of education should be important issue when process of social exclusion is tackled

Since 1990s negative natural population growth and domestic migration towards to largest cities as well as labour outflow primarily to Western Europe reflected in significant decline of the number of young people mainly living in rural regions of Latvia. Changes in distribution of population as well as outcomes of economic crisis in 2008 encouraged the responsible authorities (the Ministry of Education and Science) to introduce business management approach in the organization of the education system. The rationalization of school network through closing and restructuring financially ineffective schools significantly changed daily mobility patterns of youth living in rural areas as well as rise the question on accessibility of education in general.

This paper presents results of a one rural municipality analysis of the youth's school travel using survey in Latvia. Addressing both physical (distance) as well as socio-demographic and socio-economic (age, gender, access to car, etc.) factors affecting youth's travel behaviour we tried to determine impact of changes in youth mobility spatiotemporal patterns on their accessibility of schools.

TRANSPORT DISADVANTAGE: DIFFERENCES BETWEEN FEMALE AND MALE HIGH SCHOOL STUDENTS OF THE CITY OF ZAGREB

Author: *Slaven Gasparovic**, University of Zagreb, Faculty of Science, Department of Geography, Croatia

Keywords: City of Zagreb, gender differences, high school population, transport disadvantage

Abstract: According to scientific literature, high school population are often considered transport disadvantaged part of the society. This population has increased need for mobility, which is limited at the same time because of transport disadvantage. Transport disadvantage influences the access to life opportunities and possibilities. The aim of this research is to evaluate the influence of transport disadvantage on everyday life of high school population of the City of Zagreb. The parameters observed

were based on subjective indicators of transport disadvantage (self-reported measures) and focus groups. The data was obtained by survey which included 826 high school students of the City of Zagreb, and by interviewing 8 focus groups. High school students were asked to estimate the influence of transport problems on their everyday life in terms of importance and the level of difficulty which they deal with in their everyday lives. Analyses were performed using statistical correlation, t-test, χ^2 test and quadrant analysis. In focus groups, high school students were asked about the influence of transport on their everyday life. Obtained results indicate statistically significant difference between male and female students. Female students found transport problems more important in their lives and they had more difficulties dealing with them in comparison to male students. Problems were especially present in terms of security in public transportation during night and day. These results can indicate more pronounced transport disadvantage of female students in comparison to male students. All obtained data from survey was supported by quotations obtained by focus groups.

AN ANALYSIS OF POLICIES AND INITIATIVES SUPPORTING HIGHLY SKILLED RETURN MIGRATION IN HUNGARY

Authors: *Gábor Hegedűs**, University of Szeged, Department of Economic and Social Geography, Hungary; *Gábor Lados*, Department of Economic and Social Geography, University of Szeged, Hungary

Keywords: European Union, highly skilled migrants, Hungary, national initiatives, national policies, return migration

Abstract: The outmigration and brain drain of highly skilled labour force are global and Hungarian phenomena triggering many problems in the source countries. Nevertheless, these processes are not irreversible, and return migration could be beneficial both for returnees and the countries of their origin. Several national policies and initiatives have already been implemented in the world in order to stop outmigration and to foster return migration to the countries of origin. Our study on the main characteristics of national-level highly skilled labour force return migration policies and initiatives in Hungary involves scientific literature analysis and content analysis. In addition, we study the correspondence between Hungarian and European Union (both national and EU level) return migration policies and initiatives. Furthermore, we analyse the opinion of Hungarian highly skilled remigrants on this issue. We have found very few complex and comprehensive return policies and initiatives in Hungary. These are relatively new ones which apply only a small number of methods and tools used outside Hungary. Highly skilled returnees know these policies and initiatives well and find them beneficial. Without conscious planning and coordination, Hungarian policies and initiatives supporting returnees are less effective.

THE APPEARANCE OF SUSTAINABILITY IN THE HUNGARIAN HIGHER EDUCATION OF TOURISM

Authors: *Gyöngyi Kovács**, Károly Róbert College, Hungary; *Agnes Kerekesne Mayer*, Károly Robert College, Hungary

Keywords: higher education, sustainability, tourism

Abstract: In Hungary most possibilities of tourism are based on sensitive natural factors - like medical waters, forests, lakes etc. - so it is important to save, develop and manage them. It is unimaginable without a deep knowledge of sustainability, since reducing the tourism's negative natural, environmental and social effects to a minimal level can be only possible if the people in tourism area know these effects, and what is more, they are able to recognise and avoid them.

In the study the research's two fields focus on the expectation's quality in the tourism trade and the examination of the sustainability's education, from which you can see how far the tourism and adjusting it, the education can be taken in a positive direction, which meet the requirements of development. During the research the comparison among the trade's planned directions and the current education structure happened from the view of sustainability. The preference of lecturers in the 14 concerned universities and colleges, and the possibilities in the different subjects are parts of the research that can show the forms and the level of sustainability and intervention's necessity.

The research answers the question whether the current higher education of tourism in Hungary consists of the maintainable improvements' theoretical questions and their practical projections on a sufficient level. It helps you to decide whether it is needed to alter the structure of the tourism's education. It enlightens the fields which help the most to make the tourism maintainable.

YOUNG ITALIANS ON THE MOVE: WHO THEY ARE, WHY THEY MOVE, WHERE THEY GO

Authors: *Barbara Staniscia**, Sapienza University of Rome, Italy; *Armando Montanari*, Sapienza Rome University, Italy

Knowledge mobility has been considered as a strategic theme in the EU agenda since the Lisbon Strategy (2000); youth mobility has become a crucial issue in that framework and in consideration of the severe economic crisis that, with different degrees of intensity, is affecting European countries. EU has promoted youth mobility through several policy measures and initiatives: the harmonization of the EU university degrees, the ERASMUS programme, the "Your first EURES job" scheme, and the "Youth on the move" initiative, are good examples. Mobility of the young can be a dynamic tool to improve the individuals' employment situations, to provide career opportunities, to contribute to the creation process of a European identity, to favour personal growth and improvement of quality of life. On the other hand, that mobility poses a problem for the less developed and marginal areas of the EU territory that are losing their young resources and are not replacing them. Italy is one of the EU countries suffering for a severe economic crisis and unemployment of young people, and its marginal areas are more and more affected by a loss of young population. This paper intends to answer to the main questions posed by those movements: which are the characteristics of the young Italians who have moved (and who intend to move), which are the main reasons behind their decisions, which are the main destinations they have chosen (and they intend to choose).

THE USE OF STATISTICAL DATABASES AND CONSUMER CONFIDENCE INDICES IN THE MEASUREMENT OF THE DEVELOPMENT OF TOURISTIC REGIONS

Authors: *Bulcsú Remenyik*, Budapest Business School, Hungary; *Csilla Szalók*, Budapest Business School, Hungary; *István Kővári**, Budapest Business School, Hungary

Keywords: Lake Balaton, rural development plan, tourism

Abstract: The research carried out by the Department of Tourism of Budapest Business School explores the conditions of the settlements from a touristic perspective, based on previous experience and using a complex index of tourism, calculated for the the settlements.

THE PHENOMENA OF TOURISM SEASONALITY – CASE STUDY OF THE LAKE BALATON (HUNGARY)

Author: *Judit Sulyok**, Pannon University, Hungary

Keywords: GIN index, Lake Balaton, seasonality

Abstract: Tourism seasonality is one of the main challenges of tourism stakeholders. Most of the destinations have to face some degree of the temporal concentration of arrivals or guest nights. Obviously, waterside (coastal) and mountain areas are the most concerned. The presentation focuses on one of the most popular tourism destinations in Hungary, namely the Lake Balaton. The lake and its surroundings play an outstanding role in attracting domestic and foreign visitors to the country, one of its main asset is the water itself that is suitable for bath during the Summer months. Based on the available data on guest nights at commercial accommodation establishments, the research provides a detailed overview of the destination's seasonality. With the help of the well-known Gini index, the analysis focuses on the composition of the temporal concentration and its development during the period 2008 to 2014. The results can motivate further debate and motivate researchers and stakeholder how to mitigate this phenomenon.

VIALE GROUPED FARMSTEADS

Author: *Erika B. Pristiyák**, College of Nyíregyháza, Hungary

Keywords: tourism function

Abstract: The aim of my paper is to outline the aspects of mobility concerning grouped farmsteads (bokortanyák). I have been examining a social dilemma typical of these unique settlements.

Here, in the vicinity of a city, you can encounter country life and rural tourism. Certain layers of society already experience the positive effects of mixing rural and urban lifestyles. However, Nyíregyháza should exploit the facilities concerning tourism provided by the farmsteads to a greater extent. It is a current issue because Nyíregyháza's tourism is developing at a high rate. Moreover, farmsteads would make the city more unique and attractive for visitors.

Their origin dates back to the time of resettling depopulated areas after the Turkish occupation. Settlers arrived from Upper Hungary (today Slovakia), whose first wave had already been living in Hungary for years. The residential community of the grouped farmsteads was kept together by its language and its Lutheran religion, until the end of the 19th century, these farmsteads were characterised by convergence. After World War II the "population change" enforced by the Beneš decrees also had an influence on the population of farmsteads. The ethnic roots of the population contribute to maintaining relations with their relatives and today it has some influence on tourism as well.

The forming and the layout of "bokortanya" are unique. It is necessary to highlight the importance of exploitation of the opportunities of farmsteads from the aspect of tourism. This is possible in various ways with regard to sustainability.

THE IMPACT OF TOURISM IN THE EVOLUTION AND DYNAMICS OF THE PEȚEA STREAM NATURE RESERVE, BIHOR COUNTY, ROMANIA

Authors: *Dorina Camelia Ilieș*, University of Oradea, Department of Geography, Tourism and Territorial, Planning – CSAT, 1 University St., 410087, Oradea, Romania; *Morar Cezar*; *Herman Grigore*; *Alexandru Ilieș**, University of Oradea, Department of Geography, Tourism and Territorial, Planning – CSAT, 1 University St., 410087, Oradea, Romania; *Buhas Raluca*

The present study aims to highlight the evolution of the Pețea Stream Nature Reserve, from the Băile 1 Mai settlement, Bihor County, Romania. The reserve with thermal waters is an ecosystem of national and European importance and became well known because of the following species: *Scardinius racovitzai*, *Melanopsis parreyssi* and *Nymphaea lotus* var. *thermalis*. It is a protected area of IUCN IV category and a Nature 2000 site. The balneoclimateric resorts Băile 1 Mai and Băile Felix development, led to a dramatic decline of the lake water level, endangering also the protected species. In this circumstances by applying specific methods we have documented the major decline in the tourism exploitation of this natural attraction located in the Bihor - Hajdu-Bihar cross border area.

HUNGARIAN CHEESE ROUTES AND THEIR ROLE IN TOURISM. LOCAL CHEESE IN SUSTAINABLE GASTRONOMY

Authors: *Agnes Kerekesne Mayer**, Karoly Robert College, Hungary; *Gyöngyi Kovács*, Károly Róbert College, Hungary

In Hungary in the past couple of years the need of customers towards local cheese has increased following the trend of local food consumption which significantly contributes to the sustainable development in gastronomy. In order to satisfy this more and more handmade cheese producers have entered the market. The Association of Small and Medium Sized Cheese Producing Entrepreneurs was formed in 2006, which coordinates the Hungarian Cheese Route Network project. By the foundation of the cheese route network we can make up for the forgotten gastronomic networking, strengthen the cheese producing profession and enrich our gastronomic culture.

The aim of our research is to study the current situation of the Hungarian cheese route network as well as its operation, that is, how it presents the Hungarian cheese specialties to the tourist through the locations and exhibition sites of the cheese manufacturers. How people meet the Master, the Cheese, and the Rural Areas en route? What kind of touristic aspects are related to these?

Each cheese route includes a complex gastronomic program package within the services of the given touristic area. Besides the local cheese specialties the visitors have the chance to taste local wine, palinka and other products as well and they can also see how these products are made.

Just like wine, cheese also has a terroir character and through the improvement of our tasting skills we can learn which type of cheese goes best with which Hungarian wine. With the assistant of a good wine and cheese sommelier we can now set out for the adventures in the wine regions as well. Besides the currently operating cheese routes we can also start such gastro-touristic theme routes on the bases of the cheese and wine relation.

VALORISATION OF RURAL HERITAGE IN TOURISM

Authors: *Katinka Szabó**, University of Pécs, Hungary; *László Gyuricza*; *Géza Szabó*

Keywords: Baranya County, cultural rural heritage, eco lodge, gastronomy, rural tourism

Abstract: The aim of this paper is to introduce the valorisation and utilisation methods of the certain elements (landscape, built, material, non-tangible) of the centuries old cultural rural heritage in rural and village tourism. As it is known in the globalising world the rural areas suffer desolation due to the negative demographic and migration processes. However, parallel with the depopulation of the rural population they also lose their roots, traditions, cultural and economic heritage which the locals will be unable to inherit to the next generations. This is why there is a great need for the revitalization and the future-shaping activities of the cultural communities. These generative communities, representing the local population, tend to preserve their identity, evoke the mainly intangible heritage such as gastronomy, folk music, folk dance, which can also be coupled with the organisation of different events and festivals and further on they aim to deliver the local customs and traditions as well. The rural material and spiritual cultural heritage can be utilised in several ways and considering its sustainability one cannot dispraise the tourism purposed utilisation either. Out of the most frequently used heritage elements of rural tourism we should highlight built and material heritage since after the creative transformation of the old farmhouses they could further function as accommodations or museums in the rural areas. The created guest houses can at all events serve as a good practice and for their qualification the South Transdanubian Eco Lodge System has been developed.

SLOT6

Chair: *Anna Irimiás*

Schedule: Tuesday, 1 September, 15:00–16:45

TRAVEL AND CUSTOMER HABITS CHANGES OF THE VISEGRAD GROUP SINCE 2010

Authors: *Istvan Talabos**, Budapest Business College Tourism Dept., Hungary; *Eva Nagy*, Budapest Business College, Hungary

Keywords: technology, tourism, tourist movement, Visegrad Four

Abstract: The economic crisis of 2008 has stopped the growth of tourism world wide. Due to the crisis the contribution of tourism to the GDP decreased and reaching its lowest level in 2009 started to grow but after a two year of growth still did not reached the 2007 level in 2011. During this period there has been a substantial change in the customer habits and technology too. The authors analyse the world wide data and the European travel trends focusing on the Visegrad Group (Czech Republic, Hungary, Poland, Slovakia) countries trying to find correlation and answers of the findings.

NEW TRENDS AT THE BUDAPEST HOTEL MARKET 2000–2014

Author: *Endre György Bártfai**, BBS CCCT, Hungary

Keywords: Budapest, hotel competitiveness, trend

Abstract: The study presents the changes in the hotel market in Budapest, follows and analyzes it between 2000 and 2014. Budapest - the most popular and most known tourist destination in Hungary - hosts a large part of the domestic hotel supply. This market is very colorful, all the typical hotel types of the international hotel markets can be found in the Hungarian capital; many of those qualified by the requirements of the Hotelstars system.

The study analyses the expansion of the market, the appearance of new hotel types and their spreading in Budapest. It analyzes the hotel supply and its composition, the characteristics of each hotel types, and the distribution of the hotels by their classification. By using different indicators the study shows the economical role of hotels. Searches the explanation of why the economical crisis in 2008 has not reduced the investments, how the fashionable trends have spread and what kinds of developments are expected in Budapest in the near future.

CULTURAL TOURISM AND MUSEUMS IN BUDAPEST

Authors: *Melinda Jászberényi**, Budapest Corvinus University, Hungary; *Zsuzsanna Fehér*; *Dorottya Bodnár**, Corvinus University of Budapest, Hungary

Nowadays an increasing interest can be experienced in culture, not only in Europe but throughout the whole world. It can be observed that the relationship between culture and tourism is getting closer and the market for cultural tourism is occupying a significant place and becoming an increasingly competitive field. The aim of this presentation is to highlight the relationship between cultural tourism and the museums in Budapest. According to the results of the research survey, it can be concluded that one of the main target segment of museums are foreign tourists, who represent being less price-sensitive, more curious and more eager to take advantage of the services offered by museums.

THE ROLE OF RENEWABLE ENERGY IN THE HOTEL COMPETITIVENESS

Authors: *Katalin Juhász-Dóra**, Corvinus University of Budapest, Hungary; *Katalin Ásványi*; *Melinda Jászberényi*, Budapest Corvinus University, Hungary; *Gábor Michalkó*, Geographical Institute, HAS, Hungary

Keywords: alternative energy, green hotels, hotel competitiveness, Hungary, marketingcommunication, renewable energy

Abstract: Hotel competitiveness is influenced by several factors, including location, price and physical environment. Despite the fact, that these factors are closely related to the energy consumption of the hotels, researchers have not investigated the relationship between renewable energy and hotel competitiveness so far. It has already been stated, that if a property is located in a low energy region, then it is more expensive to obtain energy. This fact is reflected as a conclusion in the prices of the services offered.

If a hotel uses the forms of alternative energy, high-tech solar panels, cells or wind turbines, it is usually visible for the visitors. The conscious use of the alternative energy as a competitive factor until today has only occurred in the case of green hotels, which strive for energy efficiency as a form of commitment to sustainability. Renewable energy can enhance hotel competitiveness along several factors: firstly, – the high cost of investment not taken into account – these are long-term savings, secondly, it can be regarded as a useful element which is part of the marketing communication, representing commitment to sustainable growth, and thirdly, it is a factor with a strengthening effect on the physical environment and the design of the hotel.

In the research we aimed to demonstrate how the hotels in Hungary use renewable energy opportunities and how it is reflected on their websites. We also investigated how the effort for the use of renewable energy is related to the known factors of competitiveness in the Hungarian hotel industry.

CREATIVE BUDAPEST

Authors: *Adrienne Nagy*, Budapest Busines School, Hungary; *Diána Dóra Kiss**, Corvinus University, Hungary; *Csilla Petykó*, Budapest Business School Tourism Department, Hungary

Keywords: Budapest, creativity, seasonality, tourism, tourism function, tourism space

Abstract: Creativity, activity, experience – these phrases frequently turn up in tourism literature, because they are correlated with the new touristic trends. These new trends have influence for the different parts of tourism as a hole, and of course for the tourism demand and the tourism supply of the cities too. The different comment web pages, like TripAdvisor show the same, they indicate that there is a growing demand for the new and creative offers in city tourism. Recognising these facts we decided to review the tourism supply of the capital city of Budapest. Shall we say Budapest is creative? Our searching review is however different than the one represented by the Unesco Creative Cities Network. The aim of our research is to gather the creative tourist attractions of Budapest, paying special attention to the elements that require physical activity.

We will analyse

- if they are really new services or not,
- what kind of specifications these creative spaces have, for which segments of the touristic demand these services are sold,
- if there is any connection between the traditional elements of the touristic supply and the new creative services,
- if these services have any spatial and temporal aspects in area of Budapest.

The capital city of Budapest has many competitors in the European tourism market. So, it is very important to examine whether the other capital cities have similar offers in their supply or not. Namely is Budapest really creative or not.

THE ROLE OF TOURISM IN THE URBANIZATION IN NORTHERN HUNGARY

Author: *Zoltán Bujdosó**, Károly Róbert College, Hungary

Keywords: small towns, tourism function, urbanization

Abstract: Demographic changes and new phenomenon in the urbanization represent special challenges for all Europe. Thanks to the continuous changing of the legal backgrounds and process of reclassification of settlements has been on the focus of the scientific research. The legal process of the urban reclassification is very different in the countries of Europe. The study deals with the situation in Hungary, the changing of the legal conditions and its consequences. Furthermore it shows the territorial distribution of the towns in the country through secondary data. The study also tackles issues related to the role of tourism in the urbanization and reclassification in Hungary giving the example of Northern Hungary.

CLIMATE CHANGE ADAPTATION AND DISASTER RISK REDUCTION INTEGRATION: A MULTI-DISCIPLINARY AND MULTI-SCALAR PERSPECTIVE

Organizers: *Sara Bonati, Giuseppe Forino*

Location: Room I

SLOT1

Chairs: *Sara Bonati, Giuseppe Forino*

Schedule: Monday, 31 August, 13:00–14:45

RESILIENCE AND ADAPTATION TO CLIMATE CHANGE: A STRATEGY TO IMPROVE THE ROLE OF CIVIL PROTECTION IN ITALY

Authors: *Federica Appiotti**, iv University, Venice, Italy; *Fausto Marincioni*, Università Politecnica delle Marche, Italy

Keywords: adaptation, climate change, public perception

Abstract: Climate change is presenting human societies with new challenges, and despite being a global phenomenon, the required mitigation and adaptive strategies must be tailored to local effects and vulnerabilities. Thus, beyond the study of climate patterns and extreme weather events forecast, it is pivotal understanding climate risk perception of citizens, decision makers and local emergency managers. The perception of climate change impacts on local territory will help decision makers to develop effective communication strategies and enhance adaptation strategies. This is based on the assumption that risk reduction behaviors are undertaken as part of a dynamic and adaptive process by which individuals and social factors interact. Reviewing the concepts of resilience, adaptive capacity and collective actions, and analyzing their declination at different scales, the emergency management systems have been identified having a pivotal role in reducing climate change risk. Being an organization at the interface among science, policy and practice and a link among all three, Civil Protection agencies, could perform a sort of “brokerage” function fostering mitigation and adaptive policies. Following are some specific actions required to enhance the “boundary” role of Civil Protection to strengthen the links and communication among various stakeholders involved in risk reduction and adaptation: (i) identify a focal figure to sustain information networks, and translate and reverberate climate change knowledge; (ii) foster a direct involvement of civil protection system in local planning; (iii) create and manage a dedicated data repository; (iv) foster a new culture of disaster prevention through children education programs and training.

ASSESSING THE RELATION BETWEEN GEOGRAPHICAL EXPOSURE TO HYDROLOGICAL CLIMATE EXTREMES AND THE PERCEPTION AND UNDERSTANDING OF THE FARMERS AND PUBLIC

Authors: *Viktória Blanka**, University of Szeged, Hungary; *Zsuzsanna Ladányi*, University of Szeged, Hungary; *György Sipos*, University of Szeged, Hungary; *József Szatmári*, University of Szeged, Hungary; *Péter Szilassi*

Keywords: inland excess water, public perception

Abstract: Increasing climate extremities, as consequences of climate change, highly affect the public and farmers in the SE Carpathian Basin. Our research aimed at the investigation of the perceptions and experiences of public, farmers and decision makers on drought and inland excess water problems, since their knowledge and co-operation are essential in the future planning of sustainable water management. Their opinions were explored with the help of 481 questionnaires and 52 in-depth interviews in the following topics in SE Hungary: (1) Which effects of climate change are perceived? (2) How significant are the problems in their life? What effects do they observe in agriculture? (3) What are the causes of drought and the inland excess water? (4) What kinds of possibilities can they see to improve the present situation? (5) To what extent do they consider the present farming structure sustainable? The spatial distribution of the answers was compared with the spatial pattern of drought and inland excess water sensitivity based on environmental indicators. The results of both interviewing and questionnaire showed high correspondence to the spatial patterns of sensitivity. It reflects that farmers and the public consider the severity and importance of drought and inland excess problems realistic and recognise the contributing factors correctly. They are divided about the sustainability of the current cultivation; however, they agree that adaptation to changing circumstances is crucial. They see several solutions to the problems, but now they are actually puzzled and trust in the expertise of the future hydrological, engineering and research community.

DISASTER GOVERNANCE: AN INVESTIGATION OF THE 2013 FLOOD IN HIGH RIVER, ALBERTA

Authors: *Eva A. Bogdan**, University of Alberta, Canada; *Andrew Wilson*

Keywords: crisis, floods, governance, local governance, resilience

Abstract: Numerous jurisdictions in England and Wales have found that flooding issues are effectively addressed through systems-approaches that incorporate environmental and socio-political dimensions, as well as more integrated approaches, such as inclusion of, and collaboration among, key stakeholders. Moving towards such approaches requires institutional, rather than technological,

innovation, as well as a cultural shift since culture is one of the main factors for disaster losses. Culture shapes disaster governance, consisting of norms, organizational and institutional actors, and practices designed to reduce the impacts and losses associated with disasters. Alberta experienced major flooding in 2013, the most costly natural disaster in the history of Canada. Alberta is home to the largest oil sand operations in the world, has had the strongest performing economy in Canada in recent decades, and historically focused on large-infrastructure mitigation approaches. The estimated \$6 billion cost of the disaster, excluding mitigation expenses, and a growing sensitivity to the implications of climate variability, has triggered reassessment of costly structural solutions. The continued increase in losses from disaster events in Canada and around the world have revealed the need to incorporate nonstructural adjustments that address social factors, such as risk perception, historical development paths, and governance processes, all of which play important roles in reducing disaster risks and losses and enhancing resilience. This case study explores disaster governance and its decision-making processes with regard to Alberta's 2013 floods by asking the following: 1. Which mechanisms guided decision-makers at various levels in choosing among various flood management practices?; and 2. How do various levels of governance interact to shape flood management? This research aims to address the dearth of literature on contextual factors affecting disaster governance.

A HYBRID GOVERNANCE FRAMEWORK FOR CLIMATE CHANGE ADAPTATION AND DISASTER RISK REDUCTION INTEGRATION

Authors: *Giuseppe Forino**, University of Newcastle, Australia; *Graham Brewer*, The University of Newcastle, School of Architecture and Built Environment, Australia; *Jason von Meding*, The University of Newcastle, School of Architecture and Built Environment, Australia

Keywords: risk reduction, climate change, adaptation, integration, governance, stakeholders

Abstract: The growing contribution of climate change to disasters is recognized worldwide. The integration of climate change adaptation (CCA) in disaster risk reduction (DRR) is crucial to ensure benefits for societies and the environment. This paper proposes Hybrid Governance (HG) as a valuable framework as we consider the CCA&DRR integration effort. HG is a set of subjects, goals and mechanisms constituting hybrid practices, which crosses state-market-community triad and is directed by the involved actors. This paper investigates the main actors involved in CCA&DRR integration within this triad, their relational mechanisms, and actions to be undertaken to improve the effectiveness of integration. The paper recommends the exploration of the relational mechanisms and actions in HG of the variety of actors involved in CCA&DRR integration. By framing the multi-actor characteristics of CCA&DRR integration in a HG framework, research gaps are identified and classified in the interests of driving scholastic and policy action on multiple scales and levels.

LINKING DRR, ADAPTATION AND DEVELOPMENT TO ADDRESS THE UNDERLYING CAUSES OF RISK

Authors: *Karlee Johnson**, Stockholm Environment Institute-Asia Centre, Thailand; *Richard J.T. Klein*; *L. Schipper*; *F. Thomalla*; *G. Vulturius*

Keywords: adaptation, development, natural disaster, policy, risk

Abstract: There is growing attention to the relationship between disaster risk reduction (DRR) and climate change adaptation, and how the links between them can be strengthened. This paper, a background paper featured in the UN's GAR15, investigates the differences, overlaps and potential synergies between the two realms. It also explores how DRR and adaptation can inform development in order to tackle the underlying causes of vulnerability to environmental hazards. We illustrate that to achieve a truly effective and complementary approach to adaptation and DRR, a radical transformation in our thinking and actions in these areas must occur. While other efforts often encourage mainstreaming, this research supports transformative change that calls for a rethinking of current structures and institutions, active engagement with a diverse set of actors, and policies that consider the underlying drivers of risk, which are often linked to persistent issues of development. It is widely known that disaster and climate change impacts can interfere with development gains, but the effects that ill-planned development can have on DRR and adaption, for example by exacerbating or creating new risks, must also be considered. This paper highlights the ineffectual policies and governance structures that have stagnated effective DRR, adaptation and development and encourages a rethink of current practices in order to better link their issues in theory and in practice. This is important as 2015 marks the formulation of the HFA+, SDGs and a new UNFCCC agreement, providing ripe opportunities for coordination between the three frameworks and communities.

SLOT2

Chairs: *Sara Bonati*, *Giuseppe Forino*

Schedule: Monday, 31 August, 15:15–17:00

BEYOND THE "NARRATIVE OF FEAR": A MULTI-SCALAR READING OF ENVIRONMENTAL CHANGES IN THE MALDIVES

Authors: *Stefano Malatesta**, University of Milano-Bicocca, Italy; *Marcella Schmidt di Friedberg*

Keywords: adaptation, climate change, resilience, scaling

Abstract: The Republic of Maldives has become a symbol of the vulnerability to climate change. The peak of this visibility coincided with the presidency of Mohamed Nasheed (2008-2012) during which the Maldives (if we consider, for instance, the COP 2009 in Copenhagen) have gone on stage in the international debate, playing a leading role within the Small Island

Developing States Network. In the same period, the 2010 UNDP's Assessment of Development Results defined the Maldives a "vulnerable Small Island Developing State" by pointing out the fragility of human and environmental ecosystems. This "vulnerability" is deeply related to a main geographical feature: the high dispersion of land mass and population, at the same time it is linked to what Mike Hume defined "narratives of fear", in other words to the global discourse on vulnerability of SIDS. This narrative has been reinforced by a massive plethora of official reports and documents published by international agencies adopting "geographical", "socio-economical" and "environmental" vulnerabilities as interpretative frameworks to describe the "development context" of the Maldives. According to this trend, mitigation and adaptation to climate change have been converted into keywords of the national political agenda and the supra-regional scale has been used as the prevailing spatial horizon. In this contribute we propose a critical reading of these categories and references showing how working on socio-environmental relationships at local scale could be adopted as an alternative framework to understand the resilience of knowledge, practices and technologies local communities developed to cope with environmental changes.

FROM ADAPTATION TO IGNORANCE: CLIMATE CHANGE ATTITUDE OF HUNGARIAN FARMERS

Authors: *Judit Pappne Vancso**, Hungary; *Laura Bertalan*; *Mónika Hoschek*; *Ferenc Jankó*, University of West-Hungary, Hungary; *Nikoletta Németh*, University of West Hungary Faculty of Economics, Hungary

Keywords: adaptation, agriculture, climate change

Abstract: Climate change projections predict an increase in the frequency of summer drought, flood and inland water, and further decline in precipitation, which can cause significant problems in Hungarian agriculture. Using questionnaire and interview surveys we investigated the perception of climatic effects on agricultural production and explored lay knowledge on climate change and the adaptation capacity of rural population. Hence, our study will consider the farming experiences and ideas that could help farmers in successful adaptation to environmental stress. It is also important to show, how the successful adaptation techniques vary regionally, depending from the factor of the landscape (i.e. spatiality).

BUILDING UP RESILIENCE IN CITIES WORLD-WIDE – ROTTERDAM AS PARTICIPANT IN THE 100 RESILIENT CITIES PROGRAMME

Authors: *Marjolein Spaans**, TU Delft, The Netherlands; *Bas Waterhout*

Keywords: 100 resilient cities, climate change, resilience, Rotterdam

Abstract: Cities world-wide are challenged by a high complexity of acute and chronic problems, including challenges related to economic development, social polarization and segregation as well as climate change and ecological degradation. While all of these problems are complex in themselves, they also interrelate. Addressing them in a meaningful way requires governance systems possessing systemic capacities to deal with complexity. To create resilience in the urban system cities need to be able to learn, adapt and transform across sectors and levels.

One of the definitions of city resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience. This is the definition the Rockefeller Foundation adopts in its mission to promote the well-being of humanity throughout the world. One of the ways to do this is by facilitating the building of resilience in cities worldwide through its 100 Resilient Programme, since 2013.

Rotterdam is one of the first cities to participate in this programme. This city has been a front runner in preparing for climate change and striving after urban sustainability. This paper will assess the concept of urban resilience, introduce the Rockefeller Foundation effort in building up city resilience world-wide and exemplify this with the Rotterdam case.

EMERGENCY THRESHOLD INDEX: A WAY TO MEASURE AND MAP COMMUNITY RESILIENCE TO CLIMATE CHANGE

Authors: *Fausto Marincioni*, Università Politecnica delle Marche, Italy; *Fulvio Toseroni*, Università Politecnica delle Marche - Italy, Italy

Keywords: disaster risk reduction, climate change adaptation, resilience, emergency threshold index, maps of resilience

Abstract: The ubiquitous concept of resilience has opened new perspectives also in the field of Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA), and is fostering inclusive approaches, such as the social-ecological one, engrossed in the adaptive capacity of a system to adjust to a specific environment. In such an approach, the availability and use of resources becomes pivotal in differentiating structural (hard) and functional (soft) resilience; to lower vulnerability to a system must define the optimum equilibrium between these two components. Obviously, the choice of hard or soft measures to reduce climate change vulnerability and risk depends on economic, cultural and strategic choices. A major hurdle in applying the concept of resilience to DRR and CCA is the effective assessment of a system's resilience, namely the capacity of the community as a whole to prepare for, respond to, and recover from adverse events. Decisive in this computation is the definition of which parameters and factors influence the emergency threshold of a system. Such threshold, dependent on intrinsic characteristics of the system and its surrounding environment, establishes the limit beyond which the system will lose stability. From a qualitative standpoint, it exemplifies the ratio between the magnitude of impact (e.g. tropical cyclones or drought) and the resources available to the social-ecological system. Quantifying this threshold into an index will help choosing the most appropriate CCA actions. Moreover, an Emergency Thresholds Index will help move from the classic view of a map of risk to a map of territorial resilience.

ADAPTING TO CLIMATE CHANGE USING MARKET BASED SOLUTIONS IN THE DANUBE-CARPATHIAN REGION

Author: *Csaba Vaszko**, World Wide Fund, Hungary

Keywords: climate change, market based solutions, bioenergy, invasive species, ecosystem services, floodplain

Abstract: Two practical nature and business type of solutions will be presented to reduce climate change vulnerability in the Danube-Carpathian region.

In the Danube Delta, the overall goal was to contribute to biodiversity conservation and improved local livelihoods for communities by mainstreaming climate change adaptation and mitigation in local and regional (trans-boundary) policies and plans. A trans-boundary Climate Change Adaptation Strategy and Action Plan has been established, that delivers benefits to both ecosystems and local livelihoods as demonstrated by pilot activities at local level. These pilot activities included green energy generation based on wetland resources, increased awareness of local authorities and communities on bioenergy production and mobilising local entrepreneurs to take action on developing such alternatives.

Along the river Tisza, together with local communities, WWF is working on a unique, on-the-ground market based conservation project that have synergistic effects. The project wishes to accelerate a process in disadvantaged marginal village communities to improve ecosystem management practices while diversifying local income streams. In addition, this project has been successful in reducing climate change vulnerability and increasing local resilience. Tisza River is one of the most important ecological corridors and most sensitive water arteries in Central Eastern Europe. Due to the rapid expansion of invasive species the original vegetation has been forced back and the flood capacity has significantly decreased. A new partnership has been built and wild bushes of the highly invasive *Amorpha* species has started to be harvested and tested as bioenergy source for the communities and for energy producers.

P10 COMPLEX SYSTEMS, COGNITION AND TERRITORIAL PLANNING

Organizers: *Jorge Rocha, José António Tenedório*

Location: Room D

SLOT1 TERRITORIAL PLANNING

Chair: *Jorge Rocha*

Schedule: Tuesday, 1 September, 15:00–16:45

URBAN GEOLOGY MAP SERIES OF BUDAPEST (DISTRICT X)

Authors: *Anita Andó**, Geological and Geophysical Institute of Hungary (MFGI), Hungary; *Nikolett Bodnár; György Gyuricza; István Zsámbok*

Keywords: Budapest, environmental monitoring, GIS mapping

Abstract: The urban geology project of Budapest (Hungary) started in 2001. Since that time the Geological and Geophysical Institute of Hungary has mapped 10 districts of Budapest.

Urban geology is a part of applied geology, which analyses the interaction between the constructed environment with engineering activity and the geological settings and natural processes. In this case the urban geologic studies show the anomalies of cities (construction suitability, engineering geology, environmental conditions, vulnerability, hydrogeology, water supply, etc.) according to the nearby unbuilt areas. With the eye of designers and contractors we have to study the impact of geologic medium on the constructed object (houses, commercial and industrial facilities, utilities, transportation lines, metro tunnels, bridges, underground parking, etc.). At the same time as environmentalists we have to observe the effect of the constructed object on the geologic environment, for example soil and rock material and groundwater.

This study introduces the methods with the associated map series of 10 districts of Budapest. The different parameters and effects are presented by the maps of the extensive research from the 1970s which are digitized and completed with our own observations and sampling data.

RESPOND ON FUZZY RESPONSIBILITIES IN THE CROSS-BORDER MANAGEMENT OF ALPS-CARPATHIAN ECO-BIOCORRIDOR

Authors: *Milan Husar**, Institute of Management, Slovak University of Technology in Bratislava, Slovakia; *Maros Finka; Lubomir Jamecny*

Keywords: fuzzy responsibility, multiactors, multilevel governance, territorial management

Abstract: The paper explores the concept of multilevel polycentric governance (Finka & Kluvankova, 2014) as the core concept for territorial management safeguarding sustainability of Alps-Carpathian bio-corridor cutting the core area in one of the most dynamically developing metropolitan regions in Europe - cross-border region CENTROPE (Giffinger, 2005; Jaško, 2008). Developing proper approach to the management of this area reflecting the fuzzy responsibilities was a part of the project for the re-establishment of this bio-corridor (Finka & Huysa, 2011) awarded by the IENE Award 2012 and was listed as an example of successful international collaboration in the UNEP report 2013 and EC report on new priorities in programming period 2014-2020.

The developed concept provides an example of organizational and institutional scheme of the management and decision making processes determined by high level of uncertainty and unclear responsibility embedded in the governance model working

in cross-border territorial management.

Core notion is that well-established polycentric multilevel governance system is crucial for safeguarding sustainability and for successful implementation of projects on various scales, where there is no single leading authority, but responsibility is shared among a variety of actors, be it public or private bodies with many conflicting interest of actors.

Paper strives to contribute to the debates on best-practice examples of territorial governance and dealing with fuzzy responsibility arguing it is possible to synchronize the interests of multiple actors to find consensus to act towards common goal.

AGENT BASED MODEL FOR AGRICULTURAL AREAS IN THE METROPOLITAN REGIONS CONTEXT

Authors: *Eduardo Jonas Gomes**, Instituto de Geografia e Ordenamento do Território - Universidade de Lisboa, Portugal; *Patrícia Abrantes*, CEG, Portugal; *Arnaud Banos*; *Inês Fontes*; *Jorge Rocha*, University of Lisbon, Portugal

In the metropolitan regions substantial levels of soil consumption occur, putting successively pressures on agricultural land. Main impacts resulting from this phenomena are: a) the decrease and fragmentation of farmland; b) impacts on food production, c) multifunctionality of landscape and d) soil protection as a scarce resource. For these reasons, during the decision-making (planning) process it is critical understanding issues related to agricultural areas in the metropolitan regions context. Different actions that can change the land use transformation are developed by various territorial agents. They are the farmers, landowners, developers and policy makers. The goal of this study is to build predictive and exploratory scenarios for verifying/quantifying the changes in land use occupation for agricultural areas, according to different decisions from the agents in the territory. This approach will be developed in an agent-based model (ABM) context. The ABM is developed for Metropolitan Region of Lisbon. The methodology consists in to the following items:

- Database of economic, social and environmental indicators (linked to agriculture and urbanization context);
- Interviews to farmers and decision makers;
- ABM building: agents, territory and model rules identification;
- Predictive and exploratory scenarios;
- Test and model validation with the municipalities of case studies.

The model created allows us analysing and simulating the different interactions between agents and the territory. The results allow us also quantifying and analysing land use changes for each scenario. The results can be applied as recommendations related to spatial planning. This study is developed in the context of the FCT AGRIMET-MOD project (PTDC/ATP-EUR/4910/2012).

COMPLEXITY IN TOURISM SYSTEMS: NEWTONIAN OR REDUCTIONIST PARADIGM TO EXPLORE COMPONENTS, INTERACTIONS AND BEHAVIOURS

Authors: *Inês Boavida-Portugal*, Centre of Geographical Studies, Institute of Geography and Spatial Planning, Universidade de Lisboa, Portugal; *Carlos Cardoso Ferreira*; *Jorge Rocha**, University of Lisbon, Portugal

Keywords: behaviours, complex systems, components, interactions, tourism

Abstract: Identifying the underlying mechanisms of tourism system is a fundamental challenge for tourism research and holds implications for planning and management (Mill & Morrison, 2009). In general, traditional tourism research has focused on aspects of behaviour and development patterns exhibiting order, linearity and equilibrium. Based on the Newtonian paradigm of scientific inquiry, systems are understood to be highly dependent on initial conditions that explain the future outcomes (McKercher, 1999). The system is dissected into its components and behaviours are interpreted individually, assuming clock-like relationships. It is assumed that the system is predictable and operates in a linear way.

Recently, the understanding of the functioning of the tourism system has taken a rather different perspective, with the application of complex system theory in tourism research. Recognition that tourism is a complex phenomenon is currently discussed within academic literature (Faulkner & Russell, 1997; Faulkner et al., 2001; Baggio, 2008). Complexity and chaos are acknowledgeable concepts in the tourism system and many scholars believe these concepts are able to give better understanding of the dynamical behaviours that define the system. A complexity approach address tourism as being comprised by interconnected and interdependent components which behave in a nonlinear, self-organizing, on the edge of chaos way.

The current work analyzes tourism system components, interactions and behaviours, through a complex systems eyeglass adding to the existing body of knowledge on the application of complex system theory in social sciences.

SLOT2 SOCIO-SPATIAL URBAN ENVIRONMENT

Chair: *Jorge Rocha*

Schedule: Tuesday, 1 September, 17:15–19:00

DISPROPORTIONS IN THE URBAN SYSTEM OF REPUBLIC OF SERBIA AND DEVELOPMENT POSSIBILITIES IN THE CONTEMPORARY TERMS OF URBAN DEVELOPMENT

Author: *Teodora Nikolić**, University of Belgrade Faculty of Geography, Serbia

Keywords: Serbia, spatial planning, urban system

Abstract: The paper analyzes contemporary development of the urban system of Republic of Serbia from the socio economic and territorial aspect. Emphasis is placed on the disproportion in the urban system, considering that the extreme dominance of Belgrade as

the capital city and developmental lagging behind of medium-sized cities at national level are main reasons of unbalanced regional development of Serbia and weak territorial cohesion. Medium-sized cities have significant role at regional level because they build a very important link between big cities on one side and small cities and rural areas on the other. Beside the aforementioned, the paper analyzes the treatment of this problem in existing spatial planning documents at the national level. In conclusion are discussed the possibilities of further development of the urban system of Republic of Serbia based on the current tendencies in its development, the previous implementation of planning solutions and contemporary terms of urban development.

PLACE MAPPING, SOCIAL VALUES AND TERRITORIAL PLANNING: THE ROLE OF SOCIO-SPATIAL KNOWLEDGE IN SPATIAL PLANNING OF URBAN ENVIRONMENT

Authors: *Ģirts Burgmanis**, University of Latvia, Faculty of Geography and Earth Sciences, Latvia; *Jurģis Šķilters*

Keywords: social values, spatial cognition

Abstract: Although the development of ITC and GIS enables to build extremely computationally powerful, complex and dynamic models of city partly grounded in and supported by studies on human spatial cognition, most of them have overlooked or neglected the role of attitudes and values having a high predictive value or simulate the spatial behaviour and explain preferences in urban environment. Several recent studies indicate that spatial/physical structures in the narrower sense are not sufficient to generate coherent cognitive representations of external environment. Spatial memory seems to represent blends of spatial and social properties (events, people, emotions) and organize these spatial representations of place employing functional and social attributes including physical safety and spatial preferences. This paper examines the impact of social knowledge on the acquisition of spatial knowledge in urban environment. Youth (age 12-17; n=2133) – living in Riga (the capital of Latvia) were surveyed. To acquire data reflecting cognitive representations of urban environment we applied a social value mapping task developed by Tyrvaenen et al. (2007). The analysis of data shows that people attach social values to places when they mentally generate spatial representations of external environment. This process depends on factors such as familiarity with particular urban area, socio-demographic and socio-economic characteristics of subject. Our findings provide an example how mapping of socio-spatial knowledge can elicit mental representations of external environment. Acquisition of spatial knowledge is co-determined by social and emotional context of place as well as individual characteristics. That enables us to generalize that people, emotions, preferences, feelings and values have to be a crucial part of any coherent dynamic model of urban environment.

WORKING POOR IN EUROPEAN UNION

Author: *Michal Rosol**, Charles University in Prague, Czech Republic

Keywords: European Union, labour market

Abstract: The poverty is nowadays again actual topic among the social scientists. We are victims of sharp increase in income inequality last period. It concerns also people and families who are economically active. Poverty is usually connected to unemployment, but not always can employment protect against it. Based on EU SILC data, we determine empirical analysis using Gini coefficient and Theil index and development of this phenomenon with connection to financial crisis in last years in different groups of European countries.

P11 DEMOGRAPHIC CHANGE – CONCEPTUAL DEBATE AND REGIONAL IMPLICATIONS

Organizers: *Birgit Glorius, Birgit Leick*

Location: Room B

SLOT1

Chair: *Birgit Glorius* Discussant: *Birgit Leick*

Schedule: Tuesday, 1 September, 15:00–16:45

SEASONAL RESIDENTS AND SETTLEMENT IN RURAL AREAS OF LATVIA

Authors: *Ineta Grīne**, Latvia; *Elīna Apsīte-Beriņa*; *Undīne Grigorjeva*

Keywords: rural areas, seasonal residents, second home

Abstract: The new social stratum – seasonal residents has entered in countryside of Latvia at the end of the 20th and the beginning of 21st century. They have farmsteads, which are mainly used as a rest place at the weekend, holidays and/or summers. The most important criteria for the choice of the second house are proximity to the city, good road network, environment quality and landscape attractiveness.

The study is analysed the seasonal settlement from 4 Parishes in the cultural-historical area with mosaic landscape – in Vidzeme Upland, and 4 Parishes in the borderland in Latgale Region. Altogether 92 seasonal household residents have been analysed.

Types of the second home vary from individual houses in local centres and its surroundings to farmsteads in periphery, however preference by seasonal residents has been given to the farmsteads. They usually are located near the rivers, lakes, surrounded by beautiful landscape. Most of residents farmsteads is a family estate or home is owned by more than 20 years.

The seasonal residents are not engaged in agricultural activities, however usually land around the property is managed and the old buildings are preserved. In absence of seasonal residents the houses are preserved or they are looked after by neighbours.

Usually the main home of seasonal residents is in Riga or other largest cities of Latvia. Further the majority of respondents in the future plan to continue to use farmsteads as a second home. The main factors of seasonal living in rural parishes are property ownership, landscape, peace and quiet.

CULTURAL ENVIRONMENT AS POTENTIAL FOR SOCIETY RENEWAL

Authors: *Zenija Kruzmetra**, Institute of Social Sciences and Humanities, Faculty of Economics and Social Development, Latvia University of Agriculture, Latvia; *Dina Bite*

Keywords: cultural environment, depopulation, society renewal

Abstract: Society renewal is a pressing need of Western societies determined by demographic processes (aging, negative natural growth, migration, depopulation) and as a result, certain areas are losing population. Consequently, the essential goal of territorial development is to fight with the depopulation. The indirect, secondary activities which are more focused on society social renewal are not less important than the primary, direct activities which concern demographic renewal of society. Social renewal includes a variety of dimensions - rising of human capital, housing, health, living and working environment, cultural environment development and etc. In order to strengthen society, to promote society renewal in context of balanced and sustainable development, the policy-makers work out new society renewal strategies.

The renewal of society is also linked with the cultural environment, which includes both tangible and intangible cultural phenomena, as well as various social aspects. Cultural activities directly affect public participation, cooperation between the population, the development of creativity, promote inclusive society, health and society renewal.

Locations connected to cultural heritage, its surrounding settlements and the maintenance and improvement works not only suggest economic activities, but also create an attractive living environment for human resources.

The research of cultural environment development in sustainable and balanced development context of Latvia is novelty due to beginning of National Research Programme for the period 2014 – 2017 funded by the Government of Latvia (EKOSOC LV projects 5.2.4., 5.2.8.). The impact of cultural environment on the balanced territorial development has been studied in Latvia to a limited extent.

DEMOGRAPHIC DECLINE: CHALLENGES AND RESPONSES IN SHRINKING SMALL TOWNS OF HUNGARY

Authors: *Gábor Pirisi**, Institute of Geography, University of Pécs, Hungary; *Bernadett Deák*; *András Trócsányi*, University of Pécs, Hungary

Keywords: demographic changes, shrinking, small towns

Abstract: The challenge of demographic decline appears in widespread in the transition countries of Eastern Europe. Because of natural decrease and the rapidly growing emigration, shrinking no more remains the problem of cities and region with structural crisis. Our recent researches show that in Hungary almost every typical small town has to face the challenges of demographic shrinking, which endangers their human capital and economic potential, and finally, their ability to act as a central place in rural spaces. Our presentation tries to answer the question, how these Hungarian small towns react for this challenge. We analysed the planning documents and the recent project activities of small towns and searched for the patterns of recognition, acceptance and adequate handle of the demographic problems. Our final results show, that Hungarian small towns very rarely have sharp picture about the depth of the demographic crisis, they commonly believe, that processes can be inverted, and the “acceptance-based strategies” (managing the shrinking) discussed recently in literature is not a real option for them. They more often chose a barely explicit strategy to strengthening the central functions and concentrate the resources remained in surrounding rural areas.

URBAN SHRINKAGE AND THE POST-SOCIALIST TRANSFORMATION

Author: *Tadeusz Stryjakiewicz**, Adam Mickiewicz University Poznań, Poland

Keywords: Europe, Poland, post-socialist transformation, regeneration strategies, shrinking cities

Abstract: Negative demographic trends are among the most important challenges of the sustainable development of cities and regions in several countries in the 21st century. A long-term population decline in many cities is combined with a crisis of their local economies (resulting, e.g., from the collapse of traditional industries). This process, described as urban shrinkage, manifests itself in various forms. The notion of a shrinking city is not well-defined, and the strategies of urban development very often do not take into consideration the need to adjust to shrinkage and cope with its negative consequences.

The process of urban shrinkage follows a specific pattern in the post-socialist countries of East-Central Europe. The reason is that - apart from such “typical” factors controlling this process as demographic trends or the decline of traditional industries - it is closely connected with the course of the great institutional changes produced by those countries' transition from a command to a market-oriented, democratic system. The aim of this paper is to examine how the processes of urban shrinkage and post-socialist transformation are interrelated.

The paper draws on the results of an international project called CIREs, implemented under the European Union's COST Action, and consists of three parts. The first offers a theoretical background, emphasising the specificity of urban shrinkage in the conditions of the post-socialist transformation. The second presents the scale, forms of manifestation, and consequences of shrinkage in a variety of spatial contexts. In the third, regeneration strategies are discussed and assessed. The paper ends with concluding remarks and policy recommendations. General considerations are illustrated by case studies.

P12 DEPERIPHERALISATION: ADAPTATION, STRATEGIES AND POTENTIALS OF PERIPHERALISED REGIONS IN CEE

Organizers: *Jozsef Benedek, Thilo Lang*

Location: Room C

SLOT1

Chair: *Jozsef Benedek* Discussant: *Thilo Lang*

Schedule: Tuesday, 1 September, 15:00–16:45

BACK ON TRACK! DEPERIPHERALISING SZÉKELYLAND VIA REGIONALISATION AND THE ESTABLISHMENT OF ADMINISTRATIVE-TERRITORIAL AUTONOMY?

Author: *Hunor Bajtalan**, Babeş-Bolyai University, Faculty of Geography, Hungarian Geographical Department, Romania

Keywords: administrative-territorial autonomy, Deperipheralisation, regionalisation, self-determination, Székelyland,

Abstract: Growing social and economic disparities – especially due to the effects of the 2007–2008 Global Financial Crisis – as well as the ever deepening interrelations of the world are restructuring from the bottom-up the already established characteristics of the geographical space. As a result a new European geography is on the surge, where core-periphery relations gain new dynamics. At the same time the constituent elements of the nation state in front of the above mentioned challenges strive for self-determination and greater local autonomy, thus resulting a resurgence in regionalist, localist agendas. Starting from this broader perspective the aim of the following paper is to give an in-depth analysis about the dynamics of meso-level core-periphery relations in Romania, specifically focusing on one the most controversial aspects of the Romanian regionalisation process: the question of Székelyland. From the 1990s onwards despite the clear rejection of the Romanian majority the Hungarian speaking ethnic minority expressed the collective need for self-determination and the establishment of an autonomous region for Székelyland. This process resulted in the appearance of more than 15 draft proposals – more recently in 2014 –, however until now the majority of the calls were centered mainly around historical, cultural and ethnic arguments, and less around the fact that the region constitutes one of the economic peripheries of Romania. In this perspective one of the fundamental questions is that the modernization of the state administration through decentralization and the establishment of administrative-territorial autonomy could lead to the deperipheralisation of Székelyland?

ASSESSING RENEWABLE ENERGIES' IMPACT ON LOCAL COMMUNITY DEVELOPMENT

Author: *Sorin Cebotari**, Babes Bolyai University, Romania

Keywords: energy transition, renewable energies, rural development plan, sustainable development

Abstract: Generation from renewable energy sources in Romania increased from 1% in 2010 to approximately 11% in 2014 and is expected to reach 20% in 2020. While the development of renewables has a serious impact on the energy system, there are no studies which interconnect RES projects with the development of local communities in Romania. It worth asking however if renewable energy projects can have an impact on the development of communities where those RES projects are located.

In order to answer this question, current study evaluates the impact of RES on local community development by studying the relationship between different types of renewable energy projects (wind, solar, biomass and hydro) and variables which describe socio-political and economic development.

The first part of the project maps the RES resources in north-western Romania and existing RES projects. Further on, the research collects data on employment, infrastructure investments, local and regional taxes and revenues as well as on possible forward and backward linkage effects which were produced or influenced by RES projects.

The result showed important differences between types of renewable energy projects and effects those can have on local communities. Comparing solar and biomass power plants for example, we observe that biomass power plants are stronger interconnected with local community economic activities, while solar power plants have a limited effect on local economy. The influence of different RES projects is summarized in an RES impact index which describes the intensity of economic and social impact of RES projects on local communities.

GEOTOURISM INITIATIVES: SOME EXAMPLES FROM MODENA APENNINES (NORTHERN ITALY)

Authors: *Paola Coratza**, University of Modena and Reggio Emilia, Italy; *Doriano Castaldini*, University of Modena and Reggio Emilia, Italy

Abstract: The ever-growing consolidation of a new kind of tourism, more sensitive to environmental issues, has given rise to rapid expansion of the “geotourism”, a niche of Nature tourism that has developed worldwide in the last years, in which the main objects are geosites. Furthermore, with cultural aspects, civilisation's heritage elements and leisure infrastructures, natural elements are among the main factors for the attraction of tourist sites.

Geotourism in some ways is not new: even though it is a term introduced recently it is always practised but very often in an unconscious way. Just think for examples of the use of hot springs, beaches, mountains, lakes etc. In this perspective the geological and geomorphological elements can be considered as a resources from the tourism perspective for many countries. This is

particularly truth for Italy, where the rich cultural and natural heritage and the outstanding aesthetic qualities of the complex natural landscape have led to become the country one of the most important tourist destination worldwide.

This paper discuss and present a critical overview of some products elaborated in recent time in different geological context in Modena Apennines (northern Italy), highlighting strengths and gaps, and also taking into account the target of visitors they are addressed to. In particular, tourist environmental maps, geotourism maps, excursion and educational footpaths with panels, equipped trails, books in hard copy and digital format, videos, virtual flights, multimedia and audio CDs etc. will be illustrated.

MARGINALITY AND DEPENDENCY – CHANGING SOCIAL AND ECONOMIC FUNCTIONS OF RURAL SPACES WITH SCATTERED FARMSTEADS AND ITS DRIVERS

Authors: *Gábor Dudás**, MTA KRTK RKI ATO, Hungary; *Gabor Nagy*, Research Centre for Economic and Regional Science, Hungary

Keywords: dependency, marginalisation, periphery, scattered farmsteads

Abstract: The phenomenon of marginalisation occurs when compared to mainstream serious differences evolve in the organisation model and functioning of the society. The consequences of the permanently unsuccessful re-integration intentions are the social, economic and spatial isolation of certain places/areas (GIDDENS, A. 1984, LEIMBURGER, W. 2007, SOMMERS, L.M. – MEHRETI, A. 1998). This process reduces chances of market access of local actors, makes more difficult the access to transport and communication systems, which is exacerbated the lower level of public services. Isolation also limits articulation of interest and greatly reduces the bargaining power of people living in the affected area, which further strengthens the different characteristics and daily routines differ from mainstream. These factors reinforcing each other lead to political, economic and social dependency. This can be observed in uneven exchange relations, competitive handicap getting development funds, deterioration in the quality of public services and in permanently remaining accessibility problems. Researches in marginalisation suggested, that economic transformation of rural areas is embedded in complex spatial and social relations. However, spaces with scattered farmsteads show a more specified picture, so in the case of social groups living in these areas, different mechanisms, drivers and reasons may determine the marginalization process compared to other areas. The purpose of our research is to examine the socio-economic change of marginalised spaces with scattered farmsteads. During the research we reviewed the local and governmental re-integration and developmental attempts on settlements with scattered farmsteads in the outskirts, analyse and evaluate the effects of decisions made in different regional levels. The research has been supported by the National Research Fund, Hungary/ OTKA K109269.

COPING WITH PERIPHERALITY. EXTERNAL KNOWLEDGE ACQUISITION AND INNOVATION ACTIVITIES OF BUSINESSES IN PERIPHERAL SETTINGS

Author: *Martin Graffenberger**, Leibniz-Institute for Regional Geography, Germany

Keywords: firm, innovation, mobilities of knowledge, periphery

Abstract: Innovations are widely regarded as essential elements for entrepreneurial renewal and regional socio-economic development. They represent knowledge driven processes based on interactions between complementary actors. Models, that conceptualise the (spatial) configurations of such links, suggest, that a balance between closeness and distance is most conducive for activating learning and innovation. However, peripheral regions tend to be characterised by fragmented actor bases that only allow for limited local buzz, suggesting an even higher significance of trans-local channels for acquiring external knowledge.

As most regional innovation studies focus on investigating agglomerated localities, only little is known on whether businesses in peripheralised regions compensate for lacking local exchange opportunities, and if so, how associated strategies look like. But insights into the configuration of external knowledge acquisition channels, e.g. with respect to spatial range or actor composition, may contribute to further conceptualise innovation processes that occur outside actor-dense contexts. Connected questions regarding the mechanisms used to initiate external linkages in the first place often remain unaddressed, by taking for granted that firms can readily gain access to external knowledge sources. However, establishing ties to external partners requires competencies and resources, both of which are likely to vary between firms. These often neglected, yet fundamental, processes deserve further investigation and conceptualisation.

Eastern Germany and Estonia will form the regional focus to address the questions raised above. Empirically, they will be approached by a quantitative-oriented business survey and subsequent qualitative interviews with business representatives, which aim at conducting in-depth firm-level case studies.

PUBLIC LEADERS SHAPING REGIONS? ANALYZING PRACTICES, RELATIONS AND DISCOURSES OF PUBLIC LEADERS IN (DE)PERIPHERALIZING REGIONS OF ESTONIA AND THE CZECH REPUBLIC

Author: *Martine Grootens**, University of Tartu, Estonia

Keywords: leadership, peripheral rural areas, Post-Soviet countries, postsocialist transition, regional inequalities

Abstract: Most studies on leadership in rural regions have been done in a Western European context and do not consider the specificities of the Central or Eastern European context. Rapid institutional changes from planned Soviet societies to radical neoliberal thinking (even further increasing the already existing disparities within Central and Eastern European countries), but also elements of contingency from the socialist past, have created a very different environment for leadership in addressing regional inequalities. Furthermore the emphasis that has been placed on successful leaders of change does not help to understand these regional development processes and merely result in a confirmation of what is assumed to be the successful regional development.

Therefore I will go beyond identifying the “stars” of regional development and analyze the role of public leaders, embedded in (various) institutional environments, and in their (co)shaping of “peripheral” regions. Hereby I will move away from a normative

way of ranking leadership experiences and regional performance, but closely analyze the ways that regions are (co)produced or re-produced by local actors. In this way rather than being seen as powerless and economically marginal, regions, and especially their actors can be seen as co-producers (together with civil society and private actors within and beyond the region) in the process of (de)peripheralization. By analyzing the practices, relations and discourses of these individual public leaders, I will unravel their role in processes of (de)peripheralization in Estonian and Czech regions using slow qualitative methods.

SLOT2

Chair: *Thilo Lang* Discussant: *Jozsef Benedek*

Schedule: Tuesday, 1 September, 17:15–19:00

THE EFFECTS OF MONETARY EASING ON THE SPATIAL CONVERGENCE IN HUNGARY

Authors: *György Kocziszky**, University of Miskolc, Hungary; *Dóra Szendi*, Hungary

There was no substantive change in the existing disparities between the central and peripheral regions in the last ten years after the Hungarian accession to the EU. The authors will summarize in their study the possibility of econometric modelling in the relationship between regional convergence and monetary easing. On the basis of the represented model it is construed, what kind of effects has the in 2012 started monetary easing on the central, peripheral and semi-peripheral territories, and what kind of other interventions are needed to reach substantive path-correction.

THE ROLE OF SOCIAL ENTREPRENEURSHIP IN RURAL DEVELOPMENT – A COMPARATIVE STUDY BETWEEN HUNGARY AND GERMANY

Author: *Melinda Mihály**, Leibniz Institute for Regional Geography, Germany

Keywords: rural development, social entrepreneurship, social innovation

Abstract: Under this session I am proposing to introduce my ongoing PhD research project discovering the role of social entrepreneurship in rural development (a comparative study between Hungary and Germany). Although social entrepreneurship is a young discipline, it attracts an increasing scientific and policy interest. The reason for this might be, that social entrepreneurs see potential in peripheralised regions and represent a bottom-up approach for development. In spite of the fact that there are a high number of papers that study social entrepreneurship from business (mainly management or entrepreneurship) fields, its geographical aspects remain under-researched. The number of papers discovering the role of social entrepreneurship in rural development is even more limited. In the reviewed social entrepreneurship and rural development literature scholars seem to understand development from different aspects. There are authors who see development in rural peripheries as economic advancement, and there are others who argue for a multi-dimensional approach (including social, cultural or environmental aspects under development too). Lányi et al. (2013) define development as the steps towards environmental sustainability and even claim that in certain cases economic growth can not mean development at all. Building on a multi-dimensional understanding of rural development, I have formulated the following research questions:

- (1) Are rural communities in Hungary and in Germany using social enterprises as a vehicle to create local development outcomes?
- (2) If so, what kinds of development outcomes are social enterprises aiming to create, and what kinds of assets and resources are they mobilizing to do so?

SPECIALITIES IN THE INSTITUTIONALIZATION OF HUNGARIAN LEADER LOCAL ACTION GROUPS

Author: *Csaba Patkós**, Eszterházy Károly College, Hungary

Keywords: leader, local governance, rural development

Abstract: Bottom-up socio-economic rural development programs are globally spread. In the EU the 25 years long history of the LEADER program is declared a success story by official evaluations and many independent authors as well. In parallel with the enlargement process countries of the former Communist Block also started to establish LEADER-like programmes. In the 2007-2013 period LEADER local action groups became regular actors of the post-socialist rural landscape. Hungary was one of the forerunners in LEADER establishment in Eastern Central Europe. Although LEADER principles were respected in the implementation process, some contradictory phenomena also had an effect on LAG formation. In our article institutionalization is interpreted according to the theory of Anssi Paasi. Some anomalies will be highlighted concerning the institutionalization process of three generations of Hungarian action groups. Accordingly four phases will be examined: territorial form, symbolic shape, institutional constellation and established role. Beyond basic statistic data relating to the size/population etc. of LAGs, additional information were gathered from the text of integrated rural development plans. Through text analysis some details of symbolic shape could be highlighted. This paper was supported by the János Bolyai Research Scholarship (BO/00542/13/10) of the Hungarian Academy of Sciences.

REGIONAL HIGHER EDUCATION INSTITUTIONS AND LEADERSHIP IN THE REGIONAL DEVELOPMENT OF PERIPHERIES

Authors: *Garri Raagmaa**, University of Tartu, Estonia; *Anne Keerberg*

Keywords: embeddedness, leadership, network power, regional development, regional higher education institutions

Abstract: It is widely believed that higher education institutions (HEI) increase the competitiveness of a region through improvements to human resources, knowledge creation and technology transfer. This paper analyses the evolution, embeddedness in regional structures and contribution to leadership of Estonian regional HEIs. The conceptual framework combines Institutional and Complexity Leadership theories for creating a typology of regional HEIs. The empirical material is based on survey data and interviews. It appears that in order to be successful, HEI leaders have to act not only as educators but also as proactive institutional entrepreneurs, shaping regional strategies and institutions as well as national policies.

DEPERIPHERALISATION WITHIN THE EU MULTILEVEL GOVERNANCE ENVIRONMENT?

Author: *Martin Spacek**, Slovak University of Technology in Bratislava, Institute of Management, Slovakia

Keywords: East and Central Europe, institutional and technological co-evolution, multilevel governance, peripheralization

Abstract: The ongoing process of peripheralisation is evident in most parts of Central and Eastern Europe. On the one hand Central and Eastern European metropolises, usually capital cities, have been enjoying sharp development and growth in last decades. On the other hand rural regions have gone through demographical and economic decline in the Central European region at the same time. Despite huge sums of money spent from EU structural funds to reduce regional disparities during last years, gaps between core and peripheral regions became even larger.

One of potential political responses to the process of peripheralisation could be an implementation of innovative approaches within territorial governance based on improvement of cooperation between different levels of the government as well as among different actors. Although, there is quantity of theoretical approaches dealing with the EU governance only little is known about the conditions enabling successful cooperation within multi-actor decision making in particular regions. Key challenges are to identify appropriate mechanisms to coordinate various actors and their interest which interfere in the EU multilevel governance environment. Expanding the range of actors involved in decision-making should go with appropriate institutional and technological co-evolution. Purposeful institutional arrangements are seen essential to coordinate actors and power in designing efficient territorial policies of the EU to promote such co-evolution for balanced development between core and peripheral regions.

P13 EMERGING ECONOMIC SPACES, INDUSTRIES AND TRENDS

Organizers: *Éva Kiss, Neil Reid*

Location: Room G

SLOT1 RELOCATION OF ECONOMIC ACTIVITY IN CENTRAL AND EASTERN EUROPE

Chair: *Neil Reid*

Schedule: Monday, 31 August, 13:00–14:45

RELOCATION OF ECONOMIC ACTIVITY WITHIN METROPOLITAN AREAS IN POLAND. SCALE AND KEY DRIVERS

Authors: *Magdalena Dej*, Institute of Urban Development, Poland; *Maciej Huculak*, Institute of Urban Development, Poland; *Wojciech Jarczewski**, Institute of Urban Development, Poland

Keywords: firm, metropolitan areas, Poland, relocation

Abstract: Relocation of economic activity is a key subject in contemporary academic discourse. There exists a fair amount of research on the spatial and strategic aspects of this issue, which is examined from the perspective of decision-making behaviors of individual companies (for example Charles 1979; VanDijk and Pellenbarg 2000; Leitham et al. 2000; Wissen 2000; Brouwer et al. 2004; Holguín-Veras et al. 2005; Clifton et al. 2006; Ozmen-Ertekin et al. 2007; Cao Y. Nguyen Kazushi Sano Tu Vu Tran TanThanh Doan, 2013) and its consequences and determinants (Pennings, Sleuwaegen, 2000), as well as in the context of a wider set of actors and some wider global trends. In contemporary academic debate, there is also a discussion concerning relocation factors, which exert influence in the relocation decision-making process. Such factors include access to global networks, company size, rate of innovation, industry type, and many others. This presentation is designed to add to the conversation. Metropolitan areas in Poland are experiencing a rapid rate of business relocation from the central city to suburban areas. Suburban townships with special economic zones are especially popular relocation targets. The purpose of the presentation is to show the scale of business relocation in the metropolitan areas of Warsaw, Kraków, Łódź, Wrocław, and Poznań. Changes in the rate of relocation will be discussed for the last two decades. Research was performed on all companies in the study area employing at least 10 workers. Personal interviews with company representatives were used to assess the reasons for relocation and the effects of relocation. This study makes reference to research on the determinants of company relocation in urban areas (Risselada, Schutjens, Van Oort 2012).

RELOCATION IN THE HUNGARIAN INDUSTRY

Author: *Éva Kiss**, Geographical Institute HAS, Hungary

Keywords: industry, relocation

Abstract: Relocation is not a new phenomenon in the globalizing world economy. However, it has only recently become common, particularly in case of postsocialist countries. In Hungary the first relocation in the manufacturing could be observed at the turn of the millennium. Since then several firms have been relocated. The paper evaluates the major features and impacts of relocation taken place in the Hungarian manufacturing industry. It is particularly important how the latest economic crisis has affected it.

To reveal the differences in the relocation before and after the crisis is also an important aspect. Due to this accelerated process the spatial pattern of Hungarian industry can be also modified to a certain degree.

RELOCATION OF ECONOMIC ACTIVITY IN CLUJ COUNTY: THE MAKING OF A SERVICE CITY HINTERLANDS

Authors: *Norbert Petrovici**, Babes-Bolyai University, Romania; *Titus Man Cristian*, Babes-Bolyai University, Romania; *Ciprian Moldovan*, Babes-Bolyai University, Romania; *Rusu Raularian*, Babes-Bolyai University, Romania

Keywords: white collar jobs, blue collar jobs, industrial relocation, service location, economic geography of location

Abstract: The cost and availability of the labor force needed in the circuits of production are strongly dependent on the cost of re-producing laborers. The availability and the costs of the means of subsistence have a major impact on the wage level. The combined income strategy as partial proletarianization, i.e. combining minimum wage with informal resources generated by the household, did not lose its actuality during contemporary Romanian capitalism and is as widely used as during actually existing socialism in the same country. Yet the capitalist imperative of accumulation may produce new types of enclosure that run against the benefits of partial proletarianization. Intensive agriculture with highly mechanized tools and animal husbandry for industrial purpose, while in need of land, makes redundant important parts of the rural labor force. It is a population that has increasingly less access to combine income strategies, because the land is integrated in global circuits of agricultural exploit. We focus on the city of Cluj, Romania, a second tier city in the urban hierarchy of Central Europe. In the last ten year it became one of the cities with one of the highest rate of white collar workers to blue collar workers in the region. While the city of Cluj retained most of the highly skilled jobs, the county of Cluj witnessed a sharp increase in industrial, transportation, logistics and construction jobs. Using census data and accounting data at company level we discuss the economic geography of regional relocation in the county of Cluj.

TRADITIONAL INDUSTRIAL SPACES, NEW ECONOMIC TRENDS – THE EVOLVING SPECIALIZATION OF THE TRANSYLVANIAN REGIONS

Author: *Gergely Jozsef Torok**, Babes Bolyai University, Romania

Keywords: clusters, industrial change, regional development, specialization

Abstract: In the last years quite a few studies have been analyzing and describing the fate of old, traditionally industrial areas and the decline of certain industries as we know them all over Europe. Romania, and especially Transylvania, with a long tradition in industrial production is no exception.

Over the last two decades in Transylvania - although in a fluctuating manner -, in spite of the industrial decline we could see an economic growth surpassing that of the EU average, for new opportunities have emerged which have not gone unnoticed by the economic environment. New industries have developed, new areas of economic development have emerged - but have they emerged in areas previously overlooked by the radar of economic prosperity or has there just been a change in specialization of older industrial areas, taking advantage of their skilled labor force and more developed infrastructure? Whichever the case, has it been a punctual development or have managed to involve the neighboring areas in the process? Has it been a spontaneous process or it had a planned character sketched out by a newly emerging clusters? If not, is there a chance to foster cooperation between research and the economic environment with the help of economic clusters?

By answering the above questions, the goal of the paper is to analyze the changes in the specialization of certain areas and the impact and role of clusters in supporting representative industries, by managing relationships between partner institutions and involving external financing sources.

SLOT2 LAND, INNOVATION, AND EMERGING ECONOMIC SPACES

Chair: *Piotr Pachura*

Schedule: Monday, 31 August, 15:15–17:00

IMPACT OF ECONOMIC LAND PRICES ON BUSINESS PRODUCTIVITY AND REGIONAL ECONOMIC DEVELOPMENT IN WALLONIA

Authors: *Marie-Caroline Vandermeer**, Université de Liège, Belgium; *Jean-Marie Halleux*

Keywords: Belgium, economic development, firm, industrial zone, level of economic development, price levels, territorial development, urban planning

Abstract: In Wallonia, the availability of cheap industrial land is considered as an essential factor of economic development. In this region, economic activities are increasingly concentrated into economic estates, which increase tensions between developers and planners. Indeed, the creation and the extension of economic estates induce a high consumption of land, accentuating urban sprawl and urban decline.

Our research aims to clarify the relationship between industrial land – in terms of availability and prices – and economic development. Its central question is: to what extent the availability of cheap industrial land helps in the attraction of foreign companies in Wallonia as well as in the competitiveness of Walloon firms in the global markets?

The communication will be structured in three parts. The first two parts will present the context and conclusions about relationships between economic land consumption and regional development in Wallonia and in neighbouring regions. The third and main part will investigate the question of economic land prices, its impact on business productivity and consequently on regional development. This work develops a statistical analysis based on the annual account of companies. It focuses on mono-establishment companies localised in Walloon economic estates. Results show that real estate costs (land and property) vary depending on activity, size and location of companies. For example, logistics companies have the highest real estate costs: approximately 10% of their operational costs and 25% of their added-value; averages for all activities being 2.6% and 9.5%. To them, low prices undoubtedly help to keep their activities in Wallonia, in the heart of Europe.

CREATIVE TOURISM IN CAPE TOWN: AN INNOVATION PERSPECTIVE

Authors: *Irma Booyens**, University of Johannesburg, South Africa; *Christian M. Rogerson*

Keywords: creative industries, creative tourism, innovation, urban planning, urban regeneration

Abstract: Creative tourism is a growing field of inquiry which engages creative industry, creative city and urban regeneration debates. Recent scholarship observes that tourism and the creative economy are becoming increasingly intertwined. Following this line of argument, creative industries is said to have the potential to generate innovative milieux in cities, and the creative economy can, in turn, contribute to the growth of the urban tourism economies. This research identifies creative experience-based tourism as an example of novel tourism product innovation in Cape Town, South Africa. Creative spectacles and creative spaces are also investigated. This paper draws on 25 qualitative interviews, on the topic of creative tourism in Cape Town. The main findings of this research are that creative experience-based tourism is a small, but emerging urban tourism niche market with considerable growth potential and creative events are well developed currently in Cape Town but as yet poorly integrated with the wider tourism destination mix as well as creative industry initiatives; and whilst creative clusters are emerging in Cape Town, minimal development of creative urban spaces for tourism purposes is evident. Critical policy issues, which emerge from this analysis, surround recommendations for the fostering of creative networks, stimulating demand for creative tourism, developing a comprehensive creative tourism product mix, planning for creative precinct development, and integrating creative tourism into the Cape Town destination image.

NEW SOCIAL SPHERES IN ECONOMIC SPACES

Authors: *Yvonne Franz**, Austrian Academy of Sciences, Austria; *Michael Friesenecker*, Department of Geography and Regional Research, University of Vienna, Austria

Keywords: assemblage theory, commercial gentrification, economic space, social sphere, Vienna

Abstract: In this paper we look at new social spheres emerging within the framework of gentrifying European neighbourhoods. The vast body of commercial gentrification literature argues authenticity – and therefore social interactions between various social groups – gets lost due to economic standardisation processes known as “Starbuckization” or franchising systems. However, new spaces of economic use providing points of contact for social interaction are also occurring. We argue that such “social spheres in economic spaces” have a significant impact on neighbourhood interaction and identity. These spaces develop from former unnoticed and unimportant economic spaces to stimulating and identity-establishing places of social interaction.

We draw our arguments from research examples in Vienna that consider the practices of economisation and the social meaning of the business and economic space for the local community. We use the assemblage approach to equalise the practice, interpretations and metrics in the transformation processes.

EMERGING TRENDS IN THE EUROPEAN BEER INDUSTRY

Authors: *Neil Reid**, University of Toledo, United States; *Piotr Pachura*, Częstochowa University of Technology, Poland

Keywords: beer consumption, brewing industry, industrial change

Abstract: In recent years the global beer industry, through the process of mergers and acquisitions, has become increasingly concentrated. In 2013 three breweries (AB InBev, SAB Miller, and Heineken) accounted for 39.5% of the global market share for beer. In 2003 the top three breweries (AB, SAB Miller, and Interbrew) had accounted for only 22.1% of the global beer market. This trend of consolidation has impacted the industry everywhere, including in Europe. This consolidation has occurred in a market that is mature. Europeans are drinking 8.5% less beer than they did before the most recent recession and production has dropped 6% since 2008. Despite this drop in consumption and production the number of breweries in Europe has increased by 73% during the past 5 years and now exceeds 5,500 in number. These new breweries are almost exclusively small-scale craft breweries that have opened-up in response to growing consumer demand for greater variety in terms of styles, flavors, and strength of beer. In this presentation we examine the growth of the craft beer movement in Europe. In doing so we explore two theories that have been used to explain the growth of the craft beer movement in the United States – resource partitioning and neo-localism – and assess to what extent these might be contributing to the increasing popularity of craft beer in Europe.

P14 ENVIRONMENTAL GEOGRAPHY

Organizers: *André Evette, Zoltán Szalai*

Location: Room J

Session description: Environmental geography is the type of geography that is specialized in addressing the relationship between human beings and the environment, in particular, the natural resources. This discipline has several specialty groups that bridge the human/physical divide in relevant ways. The most known branches are Energy and Environment, Hazards, Landscape Sensitivity and Human Dimensions of Global Change specialty groups. This session is dedicated to the interactions of physical environment and human activities. Participation of young scientists and PhD students is encouraged.

SLOT1

Chair: *Zoltán Szalai*

Schedule: Monday, 31 August, 13:00–14:45

LANDSCAPE DIVERSITY AND HOTSPOTS OF SLOVENIA

Authors: *Drago Perko; Mauro Hrvatin; Rok Ciglič**, Anton Melik Geographical Institute ZRC SAZU, Slovenia

Keywords: GIS, hotspots, landscape diversity, landscapes

Abstract: Making geographical typologies or regionalizations of Slovenia is complicated because of an exceptional landscape diversity of the country. Namely, in this very small area of Europe, four major natural geographical units (the Alps, the Dinaric Alps, the Pannonian Basin, and the Mediterranean) meet and intersect. Thus we can mark the area as a landscape hotspot. The paper presents a methodological framework and intermediate results of the ongoing analysis of landscape diversity in Slovenia. In order to define areas with the highest landscape diversity inside the country different digital data (e.g. digital elevation model, soil map, rock map, and climate data) were collected. On the basis of the data several diversities are being determined in three different ways: according to the existing geographical typologies and regionalizations of Slovenia; according to the different classifications of relief, rocks, climate, soils, and vegetation; and according to the several natural landscape elements represented by numeric data layers (e.g. slope, curvature). Each diversity map is being defined using quantitative methods. Some of the most diverse areas will be documented on the field. Maps of landscape diversity and landscape hotspots of Slovenia can expose places with high biodiversity, important natural heritage, and areas with heterogeneous natural characteristics. The last issue is especially important. Natural heterogeneity can prevent good practices from being simply transferred from one area to another.

SPATIAL QUALITY AS COMMON DENOMINATOR OF NOVEL INTEGRATED CONCEPTS FOR RENEWABLE ENERGY DEVELOPMENT

Author: *Filip Gulán**, Institute of Management, Slovak University of Technology, Slovakia

Keywords: energy transition, renewable energies, sustainable development, territorial impacts

Abstract: In the context of turn towards sustainable energy systems as one of the major societal goals at global level, broader and sustainable use of renewable energy sources (RES) accompanied by noteworthy improvements in energy efficiency are considered as essential for future sustainable energy systems. This paper aims to provide arguments that this shift can be achieved only if spatial quality expressed by territorial capital is reflected. However, various RES and their use need to be balanced and carefully planned since they are characterized by higher spatial and temporal variability and availability. Contrary to a society based on fossil fuels to meet its energy and material demand, a low-carbon society based on RES, which are notoriously de-centralised resources, will have to draw on space and its quality as its ultimate fundament for wealth. Also, while the desirability of renewables is not doubted, comprehensive assessments of its sustainability, including territorial impacts and capital, are generally not carried out and reflected in existing policies. Such territorial impacts and spatial challenges are determined by the presence of multiple relations between RES, socio-economic and ecosystem complexity of the territory. Commitment to the concept of territorial cohesion within the EU policies, which puts contemporary objectives such as sustainability, competitiveness and quality of life into the territorial perspective, creates increasing demands on novel approaches to the energy-conscious planning and RES deployment and utilization. Therefore, this paper attempts to support the prediction of the vital role of “territoriality” within the planning and implementation of future “robust energy landscapes”.

ENERGY USE IN THE BÜKK LEADER REGION

Authors: *Adam Harmat**, Hungary; *Gábor Csüllög; Gergely Horváth*, Department of Environmental and Landscape Geography, Institute of Geography and Geosciences, Eötvös Loránd University, Hungary; *Dániel Meleg; Béla Munkácsy; Mária Szabó; László Tamás*

Keywords: energy transition, local development, renewable energy

Abstract: The shift from fossil to renewable energy requires a new approach in the energy system. We have to change our centralized model to a more decentralized one, enabling the utilization of small-scale renewable energies. This transition has started in Western Europe and partly also in Hungary. One of the most promising area is the Bükk LEADER Region. Several solar and biomass projects have been implemented here mostly by European Union funding. The Department of Environmental and Landscape Geography, Eötvös Loránd University has chosen the Bükk LEADER Region as one of the studied areas in its 3-year research programme, which try to determine the potentials of the renewable energy sources and the possible landscape conflicts which they might cause. As first step we assess the current energy use patterns of the region with the application of statistical sources as well as data collection in the field. According to our hypothesis, biomass has a significant role in the heating sector.

3D DIACHRONIC SURVEY OF RIPARIAN VEGETATION DYNAMICS BY PHOTOGRAM-METRIC METHODS: APPLICATION OF UAV AND SMALL AIRPLANE PHOTOGRAPHS

Authors: *Borbála Hortobágyi**, Université Clermont Auvergne, Université Blaise Pascal, GEOLAB, BP 10448, F-63000 CLERMONT-FERRAND, CNRS, UMR 6042, GEOLAB, F-63057 CLERMONT-FERRAND, France; *Andreas Burkart*; *Dov Corenblit*; *Jean-Luc Peiry*; *Johannes Steiger*; *Franck Vautier*

Keywords: 3D diachronic survey, aerial photographs, photogrammetry, riparian vegetation dynamics, UAV

Abstract: The three dimensional surveys of vegetation dynamics and fluvial landform adjustments at the decadal scale is needed to better understand feedbacks between morphodynamics and vegetation establishment and succession within fluvial corridors. Here, we tested the photogrammetry approach using aerial photographs of a wooded point bar in the lower Allier river, France, taken in summer 2014 at two resolutions. First, aerial photographs were taken from a small airplane, at an altitude of 500 m. Second, photographs were taken from an unmanned aerial vehicle (UAV), at an altitude of 80 m. The resolution of the photographs is 10 cm/pixel and 25 mm/pixel, respectively. We used these aerial photographs to produce canopy height models (CHM) of the wooded point bar. The accuracy of both CHMs was then analyzed by comparison with vegetation height measurements collected during a field campaign. There is high concordance between the two models and we consider the two approaches complementary. The former is adequate to map riparian vegetation dynamics at the corridor scale but with a low frequency of aerial missions (once or twice a year) because of cost and complexities associated with campaign organization. Conversely, the latter approach is suitable for a high resolution mapping at finer scales (e.g. point bar) with a lower logistical workload and higher campaign frequency adjusted to events such as floods. In addition, past dynamics of the studied point bar were analyzed by successfully producing CHMs from pre-existing aerial photographs.

LAND USE OPTIMIZATION WITH GENETIC ALGORITHM, USING THE METHODOLOGY OF EVALUATING ECOSYSTEM SERVICES

Authors: *Márton Kiss**, University of Szeged, Hungary; *Ilona Bárány-Kevei*; *Szilárd Czóbel*; *Miklós Kiss*

Keywords: ecosystem services, genetic algorithm, land use optimization, weighting

Abstract: Evolutionary algorithms provide solutions for complex decision making problems with multiple objectives, which make them widely used tools in several fields. These methods determine near-optimal solutions in the case of opposing and sometimes non-linear objectives, for which land use allocation problems are good examples. This means that individuals occurring in the evolutionary process are grids of land use patterns, and steps in cyclical evolutionary processes (mutation, selection) result in more and more optimal land use allocation, which can be characterized e.g. by the weighted sum of pre-defined objective functions. In our contribution, we used the Boundary-based Fast Genetic Algorithm. The landscape ecological framework of the method is the evaluation of ecosystem services. The aim of the algorithm is the optimization on the land use type level, therefore, the evaluation is carried out partly with land use based proxy values, which is the simplest approach in ecosystem service evaluations. In our presentation, we show a case study from the Danube-Tisza Interfluve (Hungary). The land use conflict is characterized by the tradeoffs between the interests of agriculture (provisioning services) and the need for extensive land use forms (regulating and supporting services). Food provision and timber production were evaluated using agricultural statistics and wood production economic models, while the values of carbon sequestration were based on a targeted metaanalysis. The objective functions of landscape heterogeneity and ecological value are using landscape metrics as indicators. The model results highlight the need for the higher proportion of extensive land use forms in the study area.

SLOT2

Chair: *Zoltán Szalai*

Schedule: Monday, 31 August, 15:15–17:00

OBSERVED AIR POLLUTION SPECIFICS OF THE VALLEY-BASED TOWNS IN HUNGARY

Authors: *János Mika**, Eszterházy Károly College, Hungary; *Zoltán Murányi*; *Csaba Patkós*, Eszterházy Károly College, Hungary; *Zoltán Utasi*

Keywords: valley-circulation, air-pollution, economical conditions and communal services, Hungary

Abstract: There are 21 valley-based towns in the 100 most populated ones of Hungary. This topographical feature may be advantageous due to mezoscale circulation between the valley or basin, containing these settlements and the surrounding hills. On the other hand, the hills form a mechanical obstacle that may limit the vertical mixing of pollution. Final result of these counteracting features are analysed by comparing air pollution characteristics of these settlements with those in two control groups, also counting 21-21 non-valley towns of the country. One control-group is selected in accordance with the equal distribution of these valley-based towns, whereas the second group of 21 towns does not consider their location within the country, but they include the most populated towns that do not belong to the previous two groups. Each group represents slightly over 1 million inhabitants. Five air pollution data of eight years (2006-2013), i.e. nitrogen-dioxide (NO₂), sulphur-dioxide (SO₂), ozone (O₃), carbon-monoxide (CO) and large particulate matter (PM₁₀) concentrations are compared. Annual mean, maxima and median values are analysed. The investigation is still in process. The results will also be compared to several economical and communal parameters obtained for three years of the investigated period (2007, 2010 and 2013) to explain the results also with industrial and traffic characteristics, in turn also partly related to the complex conditions of towns located in a valley. The paper is terminated by a collection of valley-based towns in Central Europe counting more than 50,000 inhabitants.

GEOSYSTEM-LANDSCAPE-ENVIRONMENT: CONVERGENCES OR DIVERGENCES?

Author: *László Miklós**, Technical University in Zvolen, Slovakia

Keywords: complexity, environment, geosystem, main-stream themes

Abstract: The geographers assume the right to the geosystem research as a matter of course. Is it the same towards the concept landscape, or the environment? The landscape, the environment are by their material essence the same material entities. Is the scientific understanding of the landscape as a geosystem, what was enforced by Central and Eastern-European geographers in last century, still valid? How much are up-to-date the complex geographical researches in comparison with the main-stream themes as the climatic changes or biodiversity loss? The main problem are not the challenging themes influencing the overall human development, but a concern that an effort on quick results may lead to simplification and flattening of the basic research, leaving the complexity, concentrating on single elements of the environment. All that attract the young researchers to seek easier, less arduous, quick success yielding themes, many times characterised by main-stream terms, often (miss)used as cliché or even key-words in order to gain project supports, as sustainable development, ecosystem services, water security, as well as new approaches as integrated management, citizen sciences, public participation, etc. – all without real deep, complex content. What is the approach of the landscape ecologists or the environmentalists to the same questions? One may easily find studies dealing with water, biodiversity, landscape, environment as separate things. All those theoretical-methodical questions decisively influence the development of geographical researches! The scientific conferences should address negotiations also to those – even theoretical – problems. Few of them are discussed in the prepared presentation.

LAND-USE PRESSURES ON RURAL-URBAN TERRITORIES, HIGHLY SUITED FOR WINE PRODUCTION. MAPPING LANDSCAPE SERVICES AND TRAJECTORIES OF CHANGE IN NORTHERN ITALY

Authors: *Luca Simone Rizzo**, Università di Padova, Italy; *Raffaella Gabriella Rizzo*, Università Cattolica del Sacro Cuore, Brescia, Italy; *Filippo Smerghetto*, Centro de Compensación Automatizado S.A., Santiago, Chile

Keywords: environmental implications, landscape change, rural-urban land conversions, viticulture

Abstract: Similarly to other European Countries, also in Italy one can observe large scale changes in the structure of land use. This is in primis caused by socio-economic pressures, mostly determining the conversion of agricultural land into artificial surfaces. More effort is required to highlight how and if the above alters urban-rural relationships, in particular landscape-wise. The authors focused on selected territories in North-East Italy as case study areas, where viticulture is intensive and provides almost uninterrupted land cover. All are important with regard to the contribution that wine gives to economic development.

Using GIS-based techniques, the authors documented the processes of land use between 1983 and 2006, analyzing in particular resulting changes of urban-rural forms. The aim is to investigate how scattered and geographically interconnected the (new) artificialisation is and how/if it impacts on viticultural landscapes. The strip of territory we have dealt with is being subjected to an aggressive sprawl which - if previously only took place in radial direction around cities' centres or in linear direction along major roads - now increasingly forces itself "from within". The intense building activity is, indeed, in danger of preventing the areas under study from maintaining a sufficient "consistency", also to be able to develop in a more varied and articulate manner (for instance touristic). Our research - evaluating the degree of loss of landscape integrity due to the anthropogenic stress - could also feed into more evidence-based territorial policies aiming to direct future transformations and preserve/promote viticultural territories.

ENVIRONMENTAL MONITORING SUPPORTED BY AERIAL AND FIELD SURVEY – A CASE STUDY ON THE WILDFIRE NEAR BUGAC

Authors: *Zalán Tobak**, University of Szeged, Department of Physical Geography and Geoinformatics, Hungary; *József Szatmári*, University of Szeged, Hungary

Keywords: aerial survey, environmental monitoring, field survey, wildfire

Abstract: During the severe wildfire, of 29 April 2012 near Bugac (Kiskunság National Park, Hungary), a protected natural area – the so called "Ősborókás" – partly burnt down. The aim of this research is to support the National Park to efficiently and accurately assess the damage and to plan and execute the restoration work using remote sensing tools. To ensure the early status registration, 1 month after the fire (7 June 2012) the first aerial data collection was performed. To monitor the regeneration of the vegetation, 1 year later (1 July 2013) a second flight campaign was carried out. On 9 April 2014 we surveyed and mapped the vegetation in the field. Using the aerial photographs and the field data, the degree and extent of the fire damages, the types and the state of the vegetation and the presence and proportion of the invasive species were determined. The remote sensing data were classified with semi-automatic methods, which identified ca. 50% of the area as completely, 30-35% as partially damaged and 15-20% as undamaged. Based on the field experiences, it is highly required to reforest the burnt area, to prevent the overspreading of white poplar against common junipers and to clean the area from the most frequent invasive species. To monitor the regeneration of the vegetation and the spreading of the unwanted species, we are planning further flight and field campaigns. In this way the revival of this valuable part of the National Park will continuously be supported.

TOWARDS A DROUGHT EARLY WARNING SYSTEM BASED ON A COMBINATION OF SATELLITE AND IN SITU SOIL MOISTURE MEASUREMENTS

Author: *Boudewijn van Leeuwen**, University of Szeged, Department of Physical Geography and Geoinformatics, Hungary

Keywords: drought, early warning, soil moisture monitoring

Abstract: Climate models predict a combined trend of higher average temperatures and less summer precipitation in the Carpathian Basin. This results in extra vulnerability of the region to droughts. Decreasing soil moisture is a crucial indicator for drought and therefore it is important to develop an operational system that can continuously monitor soil moisture over larger areas.

Currently a framework is being developed that uses a combination of in situ measurements of soil moisture and satellite based soil moisture measurements. The satellite derived daily measurements are calculated using the so-called LST/VI triangle method which is based on land surface temperature and vegetation index data, and provide only information on the soil moisture distribution within the region. This information is relative, which means that soil moisture values at the same location but at consecutive days cannot be compared to each other. The in situ measurements are accurate point measurements taken at a very high temporal interval, but only at a distinct number of locations. Using these point measurements to calibrate the satellite measurements results in spatially continuous daily comparable soil moisture measurements over a large area. These measurements are used to create a database which shows the trend of the development of soil moisture in the study region. Combined with meteorological (e.g. rainfall, potential evapotranspiration) and other data (climate and soil type), this information is essential to predict agricultural drought in the near future.

SLOT3

Chair: *Zoltán Szalai*

Schedule: Monday, 31 August, 17:15–19:00

LANDSCAPE EVALUATION FOR TOURISM PURPOSES – CASE STUDY OF NATIONAL PARK “ĐERDAP”, SERBIA

Authors: *Aleksandra Gajic**, *Branko Protic*, Faculty of Geography, University of Belgrade, Serbia

Keywords: “Đerdap” National Park, evaluation, GIS technology, landscape, recreation

Abstract: National park “Đerdap” is settled in the northeastern part of the Republic of Serbia, along the international border with Romania. By its surface it is the biggest National park in Serbia. Main geomorphological determinant of the area is Đerdap gorge with length of 100 km. The evaluation of the territory of the National park in this paper, was carried out using the method of diversity (V-Wert method). The method is based on the quantitative determination of the natural elements of the landscape where the forested area, water surface, relief, land use and climate factors are analyzed.

The aim of this paper is to determine the suitability of the National Park “Đerdap” for the recreation purposes. Application of GIS technology is based on the available data on relief, land use and climate factors.

Research framework that is set up by this model, with certain modifications illustrate the advantages of using GIS tools in the evaluation of the landscape. Processing and aggregation of a large number of spatial data can be used in the evaluation and comparison of different areas. Results of this paper may contribute to a better differentiation of the areas suitable for recreation and future tourism development in this area and could be important for future application of this method in different areas in Serbia.

INVESTIGATION OF LANDSCAPE LOAD CAUSED BY MINING ACTIVITIES ON A HUNGARIAN INDUSTRIAL REGION

Authors: *Gergely Horváth**, Department of Environmental and Landscape Geography, Institute of Geography and Geosciences, Eötvös Loránd University, Hungary; *Gábor Csüllög*; *Béla Munkácsy*; *Mária Szabó*; *László Tamás*

Keywords: landscape load, mining, quantitative assessment, landscape conflicts

Abstract: The main aim of the investigation is to determine the landscape load index of the single landscapes based on the example of a selected sample area. In the course of the determination of the indices the type of the raw material and extraction, the recent or past activity of the mining claims and their size provided the base of the evaluation; in addition, also geoinformational methods contributed to the assessment. The sample area once was a significant mining region; among several raw materials especially the importance of its brown coal and basalt mining was overriding. The landscape-forming impact of the mines, together with the former – by now mostly abandoned – industrial plants settled on these raw materials up to now determines the image and character of the landscape both in direct and indirect way. By using the elaborated load indices it is possible to summarize and rank the impacts and consequences, and, on the other hand, the indices promote to recognize what kind of landscape conflicts exist caused by mining land-use, what is the level of these conflicts and what are their after-effects in the investigated landscape. In addition, the determination of these indices contributes to establishing a qualitative database, as well, which promotes the investigation of the impacts of the mining activity from the point of view of the landscapes. The results of the research are to be used in practice, too, because revealing of the landscape conflicts by indices can promote to the reclamation of the landscapes and can contribute for making plans for the optimum usage of the landscape for the self-governments and for other officials and local authorities.

MATHEMATICAL METHOD FOR MEASURING THE SIMILARITIES OF HUNGARIAN MICROREGIONS

Authors: *Péter Csorba**, University of Debrecen, Hungary; *Teodóra Bata*; *Gábor Mezősi*, University of Szeged, Hungary

Keywords: landscape modelling, landscapes

Abstract: It would be useful to know the grade of similarity of microregions for landscape classification, landscape potential determination and landscape analysis. Geography measures landscape similarity on the basis of landscape elements – e.g. relief difference, water supply, soil productivity, etc. – and land use data or built-up grades. Unfortunately, comparison of the discrete, nominal or interval data of such indicators is very difficult.

Our method is aimed for the more objective determination of the so called taxonomic distance described above. Nine indicators have been selected: average relative relief, productive layer thickness, PaDI drought index, built-up area ratio, forest covered area ratio, vineyard ratio, NDVI value of vegetation, effective mesh size index of the landscape structure and hemeroby level. Based on these indicators a data matrix was created for all of the 230 microregions of Hungary. Then the so called difference co-efficient was determined with which the Euclidean distance of the microregions according to all of the indicators was calculated. For measuring differences the Multidimensional Scaling (MDS) method, Kruskal stress measurements were used and Agglomerative Hierarchical Clustering (AHC) was performed.

Applying MDS and AHC methods the differences and similarities of microregions in Hungary can be measured more accurately than before. Microregions can be identified that require greater attention in the course of for example landscape planning because, based on the results, they belong to different clusters and are different from the neighbouring microregions at the same landscape hierarchy level.

P16 GEOGRAPHICAL EDUCATION

Organizers: *Péter Bagoly-Simó*, *Gergely Horváth*, *Mariann Makádi*

Location: Room K

SLOT1 TEXTBOOKS AND CURRICULA

Chair: *Péter Bagoly-Simó* Discussant: *Gergely Horváth*

Schedule: Wednesday, 2 September, 08:30–10:15

COMPARING THE GEOGRAPHICAL MISCONCEPTIONS OF HIGH SCHOOL STUDENTS AND UNIVERSITY UNDERGRADUATES

Authors: *Anett Kádár**, University of Szeged, Hungary; *Andrea Farsang*

Keywords: geographical education, geographical misconceptions, plate tectonics, science literacy

Abstract: The international research into the nature, emergence, and development of scientific misconceptions is substantial; however, Hungarian educational research lags behind in exploring this phenomenon in detail. The main goals of the present study are to compare the geographical knowledge structure and the misconceptions of two distinctive groups of students: one consisting of Year-9 Hungarian high school students, the other consisting of Hungarian university undergraduates majoring in Geography. The definition of misconception used in the present study is that of E. Korom's, who states that misconceptions are concepts, systems of concepts, models of certain environmental phenomena that are not in accordance with the generally accepted present-day scientific knowledge; also, misconceptions are deeply rooted in the cognitive structure of children and adults alike, they remain almost intact despite formal education, and, as a result, they are difficult to change (Korom 2002, 139). The survey was pilot tested, and necessary changes were made to improve the efficiency of the diagnostic tool used in the present study, which consists of a background information questionnaire, a word association test, an aptitude test with open-ended questions, and an achievement test. The theme investigated in the present paper is plate tectonics. As the nature of misconceptions is special, mainly qualitative, but also quantitative methods were used when evaluating the surveys. The evaluation process is based on triangulation: the fundamental theory applied is grounded theory. Preliminary results suggest that while culturally induced misconceptions are not present, layman's experience, mistakes in textbooks, flaws in teachers' explanations as well as extensive media coverage of certain topics, and informal learning interfere in the emergence of geographical misconceptions. Also, no major difference is found between the misconceptions of the two groups, despite one of them consisting of Geography BSc students.

POSSIBILITIES OF LEARNING GEOGRAPHY WITHOUT HANDBOOKS

Author: *Teresa Sadoń-Osowiecka**, University of Gdańsk, Poland

Keywords: educational transformation, knowledge production, PBL, practising society

Abstract: We heard everywhere about many sources of information in our contemporary world, about necessity of lifelong learning. Because of this the policy tries transforming educational systems. But for the best results it is necessary to give freedom of learning, particularly in geography learning. The world and our meanings of the world can change very fast in our times. Closed and rigorous controlled programmes of teaching geography are inadequate to this complexity world.

The author presents results of research in three Polish schools, where were undertaken attempts at a learning without handbooks. Students produce geographical knowledge themselves with using all materials from their everyday life: i.e. traditional atlases, books, GIS, Internet, news from newspapers, from the radio or from TV, observations etc. From these sources they produce their

own knowledge, but this process must be adequate to scientific constructed geographical knowledge. PBL helps with the solution this problem. Students create their own handbook and compose their knowledge in specific ways adequated for their individual ways of thinking. The base of those methods of learning are Piaget's and Vygotsky's theories, but yet ideas of polish didacticians of geography too: E. Romer, W. Nalkowski (in the beginning of XX century) and after: G. Wuttke and J. Winklewski.

The author uses qualitative methods (observations, interviews, the analyse of artifacts, the hermeneutic interpretation) to explore problems: how do teachers feel with these methods of school learning? How do learners feel with producing their knowledge? What is results this learning?

VISUAL LITERACY AND GEOGRAPHY TEXTBOOKS – EYE-TRACKING STUDY

Author: *Yvonne Behnke**, Humboldt University Berlin, Germany

Keywords: eye tracking study, geography education, geography textbook, geostatistics

Abstract: Modern Geography instruction relies intensely on media. This paper addresses the challenges of learning with images, graphics and image-text combinations in Geography textbooks. It also examines in which form “visual literacy” is relevant for teaching and learning with Geography textbooks.

In the forefront is the question of how students link image and text information on a geography textbook spread in order to attain understanding of the content or to complete an assignment. Interdisciplinary observation methods are applied to connect aspects of Geography education and visual communication (communications theory, design) with aspects of text/image research. There is a close relationship between visual perception and eye movement. Eye Tracking as a visual method of data collection and analysis was used for precisely monitoring the eye movement. Eye tracking records which part of a textbook page, and to which degree, draws the viewer's attention and which areas are ignored. In a random sampling, 20 test subjects were tested. The test subject's eye movement was recorded while observing selected textbook spreads as well as while answering exemplary task questions taken from five contemporary Geography textbooks on identical topics. The eye tracking study revealed students' difficulties processing information from complex image/text combinations. Based on the eye tracking documentation, the challenges facing learning with graphics and image/text combinations were elucidated and placed in relationship to educational psychology insights. The research results form the base for the development of design based strategies to improve students picture text comprehension, which could be applied in geography textbooks.

RENEWAL OF THE METHODOLOGY OF THE GEOGRAPHICAL EDUCATION BY USING NEW GENERATION OF TEXTBOOKS

Authors: *Mariann Makádi*, Hungary; *István Arday*; *Gergely Horváth**, Department of Environmental and Landscape Geography, Institute of Geography and Geosciences, Eötvös Loránd Univesity, Hungary

Keywords: geography education, geography textbook, methodology, new generation

Abstract: Geographical education is suffering crisis since two decades: while the quantity of the content and the demand for creating competences relating to it was multiplied, the timeframe decreased radically. Traditional methods of the education are already not viable; however, this fact is only barely acknowledged by the teachers. Therefore, the key is the improvement of the methodological culture of the teachers, who are rather conservative, e.g. they strongly stick to the teaching materials of the textbooks during the lessons. Hopefully it will be improved by a new generation of textbooks, which are edited in the Hungarian Institute for Educational Research and Development based on the National Curriculum and on the Frame Curricula of 2012. Among others their main new methodological items are:

- their basic concept sets out from the research-based learning: preliminary raising of problems; investigations; research etc.;
- they adopt reflective educational strategy: progress from the general to the individual during the elaboration; set the details in the whole; do not repeat elaborated elements, only reflect to the former treatment of a subject and build it onward;
- use many mind maps, networks of notions, systematisers of themes, or summing ups;
- formulate teaching practices, e.g. how to analyse figures, diagrams, pictures; how to learn easily the geographical names etc.;
- contain drawings close to children's mentality;
- contain infographic-like thematic map sketches;
- and contain tasks stimulating discussions, expressions of opinions.

GLOBALITY AND EUROCENTRIC NARRATIVES IN HUNGARIAN HIGHER EDUCATION

Author: *Zoltán Ginelli (Gyimesi)**, Eötvös Loránd University, Department of Social and Economic Geography, Hungary

Keywords: Eurocentrism, global history, narrativity, postcolonialism

Abstract: This research, conducted at the Karl Polanyi Research Center for Global Social Studies, aims at questioning whether and how globality and a global historical perspective is provided in the education system of Hungarian universities. The theoretical argument of this paper will rely on various critical approaches, such as global sociology and history, world-systems theory, and postcolonialism, which argue for the increasing relevance and much-needed awareness of a global historical perspective in critically elucidating our Eurocentric or Western knowledge production and narratives of world processes. The empirical study of this paper will fall into two parts. First, this paper will present the findings of a discourse analysis, which aims to deconstruct textbook narratives in geography (both in public and higher education). Second, this paper will present the comparative study of curriculars in sociology, history, international relations, politology and geography in five major Hungarian universities. The paper will argue that many of these curricula lack a global and comparative perspective, and geography textbooks are especially biased by Eurocentric narratives and an inherent modernization theory, which is a specific product of the 'postsocialist condition' in Hungarian geography. As a geographer, the author will aim at showing that there is a great need for producing new textbooks in geography that rely on critical understandings of global and world historical processes, as textbooks have a major political role in conditioning or reproducing social inequalities.

25 YEARS LATER: GEOGRAPHY EDUCATION IN POST-SOCIALIST EUROPE

Author: *Péter Bagoly-Simó**, Humboldt-Universität zu Berlin, Germany

Keywords: curriculum, geography education

Abstract: The aim of this paper is to analyze the development of school geography education during post-socialist transformation. Drawing upon theories of transformation and curriculum theory, the paper analyzed curricula from selected post-socialist European countries. Qualitative content analysis served the map both content and skills introduced by the educational documents. The results show that national geographies are still disconnected from international perspectives, hold on to a traditional view of geography, and contain no specific geographical skills.

SLOT2 GEOGRAPHICAL KNOWLEDGE AND SKILLS

Chair: *Péter Bagoly-Simó* Discussant: *Gergely Horváth*

Schedule: Wednesday, 2 September, 10:45–12:30

GEOGRAPHICAL KNOWLEDGE OF COUNTRIES IN THE CARPATHIAN BASIN

Authors: *Erika Homoki*, College of Nyíregyháza, Hungary; *László Sütő**, College of Nyíregyháza, Hungary

Keywords: geography education

Abstract: Changes in Hungarian public education came hard on geography. The social value and prestige of the subject has been fallen back in recent years. Therefore efforts are being made to renew its knowledge, competences and teaching method. Our study about the subject content is a first step towards it. Hungarian speaking pupils and students from 4 different countries (Slovakia, Ukraine, Romania and Hungary) completed our questionnaire. By public education related questions conclusions have been drawn about the level of respondents' knowledge – on this basis we proposed recommendations for the curriculum reform. We also made a comparative analysis to get a general knowledge about the weaknesses of geographical thinking in different countries.

ENVIRONMENTAL ATTITUDE, ENVIRONMENTAL EDUCATION AND GEOGRAPHICAL EDUCATION

Authors: *Gergely Horváth**, Department of Environmental and Landscape Geography, Institute of Geography and Geosciences, Eötvös Loránd University, Hungary; *Judit Visi*

Keywords: environment, geographical education

Abstract: Observing and description of the natural and social phenomena and the processes of our closer and wider environment are fundamental tasks of the geography. While the processes, which endanger the environment traceable to geographical reasons, the geographical education has to undertake consciously the introduction of the environmental processes and to reveal the role of the society in the environment-transforming activities of which measure is getting more and more alarming. The importance of the environmental education occurred in the 1980's in the geographical education. Elaboration of environmental problems and development of environmental attitude has been emphasised in the geographical education owing to the introduction of the new National Curricula (NC) in 1995. Change of approach, thinking on the environment as a vulnerable system has been emphasised in the geographical education since then. The revisions of the NC in 2006 and 2012, by drawing up of the key competences and the new stressed development tasks, strengthened onward the significance of the environmental attitude and education. The question is, that the environmental attitude having been formulated in the educational documents in which extent is turning up in the core curricula which directly regulate the education, and in the text-books based on them. The aim of the presentation is to introduce the connection of the environmental and the geographical education and to investigate the perspectives of the further development of the contents and methodology.

SEE, NOT ONLY LOOK AT! OBSERVATIONS AND INVESTIGATIONS IN GEOGRAPHICAL EDUCATION

Authors: *Mariann Makádi*, Hungary; *Gergely Horváth**, Department of Environmental and Landscape Geography, Institute of Geography and Geosciences, Eötvös Loránd University, Hungary

Keywords: experiment, geographical education, investigation, teaching geography

Abstract: One of the main problems of the education of the sciences that it separates from the reality. However, on the other hand the notion "reality" has different meaning for the scientists and for the actors of the education. Moreover, it has different meaning also for the teacher and the student, the former one considers reality the objective environment, the latter one the virtual environment. Therefore nowadays the main task is becoming acquainted directly to the natural environment, which can be carried out only in real environment by experiencing. The traditional education tries to show the reality in theoretical manner to the students, therefore they try to complete the snatches of the reality by their fantasy; therefore, because of the lack of understanding or of knowing facts their ideas of the reality can be malformed. But, if the teacher illustrates the reality, then the students spare its imagination. The teacher has to help them to see and not only to look for the reality. Nevertheless, to create ability for "seeing" has a hierarchic order. The students can attain the ability for investigations by the strategy of the research-based learning.

The presentation try to introduce, how the task-systems of observation, description, investigation and experimentation can build on each other and how they represent the different grades of the scientific thinking.

FINANCIAL LITERACY AMONG 15-17 YEARS OLD SECONDARY SCHOOL STUDENTS – THE RELEVANCE OF THE ECONOMICAL EDUCATION

Authors: *Bertalan Péter Farkas**, Hungary; *Ildikó Éva Kovács*; *Aranka Mészáros*; *Gyula Nemeskéri*

Keywords: economic education, financial awareness, financial literacy of the youth, financial literacy, public education

Abstract: At present, the issue of financial awareness, financial literacy in our country becomes a target of disputes. In the recent years the incomplete instructions of the bank clerks and financial advisors, the received incorrect information, and the lack of knowledge of the people could be the factors that many people have poor and unfavorable financial decisions (foreign currency based loans, several long-term investments which became loss). In our study, first, we show you why we think it is an important topic and how does it connect to the economical education and geography education, second, we introduce the related domestic research in this topic in recent years, and finally, we will present the results of a comparative analysis, which was carried out with more than 500 secondary school student from Grade 9 to 11. In our questionnaire-based research we wanted to investigate the context between financial knowledge, money treatment, saving propensity, family conversations about money, as well as the satisfaction with actual financial situation and we would like to investigate that whose advices listened by the students at their age.

In our country, there are a number of initiatives to promote financial literacy among the younger generation, such as educational programs or funds for financial education. Our research covered by the TÁMOP (SROP)-3.1.2-12/2 project „Your money – Your Future! Know, understand, treat! – The development of financial awareness in the 15-17 years students”.

ABILITIES IN GEOGRAPHY IN COMPULSORY SCHOOL IN SWEDEN – AN INTERNATIONAL COMPARATIVE PERSPECTIVE

Author: *David Örbring**, Department of Education, Lund University, Sweden

Keywords: geography education, teaching

Abstract: In my paper session I will discuss my dissertation, in which I investigate how the Swedish curriculum in geography for compulsory school is constructed. I also analyse the view of knowledge in the curriculum and put it in an international perspective. Another important aspect is studying the intentions behind the policy documents for geography teachers. Furthermore, in my research I analyse how geography teachers describe their trying to develop students' geographical abilities. I want to relate the teachers' descriptions of geographical abilities to how the term is used in a national and an international context and compare with other related terms, such as geographical thinking, geocapabilities and spatial thinking. My aim is also to relate the teachers' descriptions to the traditions of geography, to the view of knowledge and the teachers' goals and to the purpose of their teaching. The research is a case study, consisting of various qualitative methods: reflections of recorded lessons together with the teachers, interviews with teachers and interviews with key people involved in the process of making the policy documents. My research can contribute and relate to the important and relevant question about why young people need to develop geographical literacy and proficiency.

TAKING A STEP OUTSIDE THE PHOTO AND FRAME: ANALYZING DRAWINGS DEPICTING NEW YORK CITY IN THE CONTEXT OF GEOGRAPHY EDUCATION

Author: *Markus Tapani Hilander**, University of Helsinki, Department of Teacher Education, Finland

Keywords: drawing, geography education, photograph, visual methodology, semiotics

Abstract: The combination of geography and semiotics is rather rare. Nonetheless, geography as a discipline has always been visually oriented because of the usage of maps. However, geographers tend to be interested in the “final” meanings of visual representations rather than the processes through which the meanings are produced. To approach these processes, a photo taken in New York City was printed on an A3-sheet and 64 Finnish high school students were asked to continue the photo by drawing around it.

In this methodological paper, different ways to conduct a content analysis of the drawings are introduced. The “development compass rose” is used as a geographical way of approaching the drawings. Like the four principal compass points, elements in the drawings are sorted into four domains: natural, economic, social and political. A Finnish semiotician Eero Tarasti also establishes four spheres in his “Z model” that is used as a semiotic way of interpreting the drawings. Tarasti's categories are as follows: body (M1), identity and personality (M2), social roles and institutions (S2) and norms and values (S1). The presentation will demonstrate how the development compass rose and the Z model could be used as vehicles for an analysis. Special attention is paid on the very question of which one does a photo re-present, the worldview of the photographer or the viewer.

SLOT3 HIGHER EDUCATION

Chair: *Gergely Horváth* Discussant: *Péter Bagoly-Simó*

Schedule: Wednesday, 2 September, 15:00–16:45

A RESEARCH COORDINATION NETWORK FOR GEOGRAPHY EDUCATION

Authors: *Michael Solem**, Association of American Geographers, United States; *Richard Boehm*

In 2013, National Geographic's Road Map for 21st Century Geography Education Project issued a research agenda for broad-scale improvements in geography education. Although the Road Map Project identified remarkable examples of research and scholarship in geography education, its report made clear the field has long suffered from a lack of scientific approaches to educational research. Consequently, the geography education research literature is largely characterized by studies that are descriptive

and anecdotal, with few examples of longitudinal studies and interdisciplinary approaches. Because of the historic absence of research collaboration and networking across multiple sites, information and data sharing among researchers has been minimal. Seeking to build research capacity and capability in geography education, the Association of American Geographers and Texas State University established a National Center for Research in Geography Education (NCRGE). The NCRGE is a research coordination network with the mission to provide the institutional leadership required to remedy the longstanding structural problems that have undermined the quality and usefulness of geography education research. As of January 2015, the NCRGE research coordination network consists of dozens of researchers affiliated with 32 universities in the U.S. as well as several universities in Asia and Europe. Through coordinated, strategic networking, the NCRGE will build a research community that generates data and evidence in areas of geography education research where empirical work is lacking or underdeveloped. This presentation will provide a progress report on the NCRGE, including an overview of current research projects.

FROM GEOGRAPHICAL EDUCATION TO TERRITORIAL EDUCATION. THEORIES AND PRACTICES FROM THE LABORATORIES OF GEOGRAPHY FOR STUDENTS OF EDUCATIONAL SCIENCES OF THE UNIVERSITY OF TURIN

Authors: *Giacomo Pettenati**, University of Turin, Italy; *Cristiano Giorda*

Keywords: teaching, territory

Abstract: Geographical education is internationally recognized as a useful and fruitful vehicle for the transmission of other types of education and competences, strictly related to important challenges that societies and environment face. It is the case of the education to active citizenship, to interculturality and cultural diversity or to sustainable development, as witnessed by the two Declarations of the International Geographical Union on Geographical Education for Cultural Diversity (in 2000) and on Geographical Education for Sustainable Development (in 2007).

In the last years at the University of Turin the concept of “territorial education” has been developed (Giorda and Puttilli, 2011; Dematteis and Giorda, 2013), relating the teaching of geography to the debate on the awareness of territorial values of places, as the base for a sustainable, aware and active citizenship (Magnaghi, 2000). The core of the idea is the idea of territory and territoriality as developed mostly in the Italian and French debate and only recently introduced into the Anglo-Saxon debate (Klauser, 2012).

The aim of this contribution is to reflect on the idea of “territorial education” from a theoretical point of view, moving from the empirical experience of several laboratories carried out in the last five years with the students of the classes of Geography and Teaching Geography of the department of Educational Science of the University of Turin. The students have been directly involved in the identification and interpretation of territorial values of three different fieldworks (an Alpine village, the town of Savigliano and the city centre of Turin), with various methodologies of analysis and representation.

BERTAGNI GEOGRAPHY: A NEW WAY OF THINKING, TEACHING AND APPLYING GEOGRAPHY. PARADIGMATIC CASE STUDIES OF GEOGRAPHY BASED, MULTI-PERSPECTIVE AND MULTI-DISCIPLINARY APPROACHES

Author: *Marco Bertagni**, Italy

The project Bertagni Geography is a journey into the world of Geography, which is looked at as a riverbed that takes shape and content when sprayed by the waters of other fields of science.

A group of persons of different origins and competencies have committed themselves to intercept the various sources of knowledge that are complementary to geography so that the water of the diverse effluents can flow into the main riverbed of a fully comprehensive and harmonized knowledge. The subject of geography has been steadily integrated by other branches of science or topics; each binomial was then refined through interviews to international professionals with expertise in a specific area and through specialised in-depth articles. With this new cross-cultural character and role Geography has been placed in functional relation to the knowledge and the representation of the world, to the study of the dynamics of man and populations, to the analysis of the environment and the territory, to the understanding of economic activities. This project is above all a tribute to geography that we have investigated through multi-facetted glances with the intent of offering a modern, flexible and effective perception; we would never want that geography is regarded as a closed and self-referential system or as a strictly notional, mnemonic and austere knowledge. Two paradigmatic examples of a geography based but multi-perspective and multi-disciplinary approach are:

- The reclaiming of the Zuiderzee. Geographical, social, economical, environmental consequences of the closure of the Zuiderzee and the creation of Polders.
- Somewhereness: Mediterranean spirit(s) & style. A geo-localization program in China for a group of Mediterranean wineries based on a Genius Loci approach.

AN INTERNATIONAL COMMUNITY FOR SCIENCE EDUCATION IN EUROPE: SCIENTIX

Authors: *Bertalan Péter Farkas**, Hungary; *Attila László Föző*

Keywords: engineering, geography, geography education, mathematics, science, stem, technology

Abstract: Originally an initiative of the European Commission, Scientix is managed by European Schoolnet under the European Union's 7th Framework Programme. Scientix promotes and supports a Europe-wide collaboration among STEM (science, technology, engineering and maths) teachers, education and STEM researchers, policymakers and other STEM education professionals. It supports the effective usage of ICT in classrooms and the spread of innovative pedagogical methods.

In first stage (2009-2012), the project built an online portal to collect and present European STEM education projects and their results, and organised several teacher workshops. The goal of the second phase (2013-2015) is to expand to the national level.

Through the network of the National Contact Points (NCPs) and ambassadors, Scientix aims to reach out to national teacher communities, and contribute to the development of national strategies for wider uptake of inquiry-based and other innovative approaches to science and maths education. It starts a discuss about ICT and digital technologies in science classrooms, and aims to raise the quality of STEM teaching and learning.

The main stakeholders of Scientix are teachers, researchers and project managers in STEM education, and policymakers. The NCP in Hungary is the Educatio Public Services Nonprofit LLC. The aim of our presentation is to introduce the European goals of the Scientix project, disseminate the results and achievement up to now. The Scientix project could produce many results in Hungary too. The talk and article is mainly about the activities and results in Hungary and how could Scientix contribute to the development of education of geography.

P17 GEOGRAPHIES OF NATURE – UNDERSTANDING, SENSE MAKING, KNOWLEDGE MAKING

Organizers: *Zoltán Ginelli (Gyimesi), Ferenc Jankó*

Location: Room H

SLOT1

Chairs: *Zoltán Ginelli (Gyimesi), Ferenc Jankó*

Schedule: Monday, 31 August, 17:15–19:00

SOCIAL SUSTAINABILITY IN ROME'S NATURAL PROTECTED AREAS: NEW PERSPECTIVE AND METHODS

Author: *Stefano Ancilli**, La Sapienza University of Rome, Italy

Keywords: green areas, social sustainability, sustainability

Abstract: Equity, diversity, interconnections/cohesion, quality of life, democracy and maturity are the six dimensions of social sustainability given by 1998 Nobel Prize Amartya Sen. Following these principles, RomaNatura, the regional public office that manages all the natural protected areas inside the city of Rome (Italy), started new projects to promote social sustainability in urban context. The strong urban pressure on green areas, the increasing of violence, inadequate public transportation, deterioration in quality of life are only some of the problems in people's everyday life. The main RomaNatura's goal is to give back to Rome's citizens renovated spaces where they can improve their general quality of life, feeling safe and protected, and being involved in a general transformation process. A new (for Italy) perspective on volunteer programs, different marketing strategies, a greater involvement, and the improvement of local economy are the four pillars of this new project, started in 2014. This paper wants to present, in details, the values of social sustainability in natural protected areas in urban context, the new methods applied in the project and the results reached in the first year of activity.

(RE)PRODUCING POWER AND EXPERTISE IN MEXICO'S FORESTS: A CRITICAL LOOK AT EARLY REDD+ INITIATIVES

Author: *Beth Bee**, East Carolina University, United States

Keywords: development, environmental change, gender, inequalities, knowledge production, theory

Abstract: As forests play a key role in the capture and storage of carbon, international NGOs and states are working together to promote programs that provide financial incentives for forest communities to reduce deforestation and forest degradation. Mexico, in particular, is considered to be among the more advanced countries in their promotion of such programs and in piloting other carbon mitigation programs referred to as Reducing Emissions, Deforestation and Degradation (REDD+). However, the ability of these programs to reconcile the tenuous relationship between economic efficiency and social equity in design and practice remains a serious concern. As these programs become the instruments through which REDD+ becomes implemented, we need a better understanding of how existing projects integrate differently situated actors, their knowledge, and the environmental outcomes of these social dynamics. This paper attempts to address this need by combining critical development, environmental governance and feminist theory to investigate the socio-spatial politics of exclusion and the production of subjectivities and expertise in existing forest projects in Mexico. To do this, I present the initial results of a case study among forest communities participating in early REDD+ programs in west-central Mexico. In particular, I hope to highlight the material and embodied practices that constitute subjectivity within REDD+ as well as the social and spatial ways in which REDD+ runs the risk of exacerbating already existing inequalities. Analyzing social difference in this way demonstrates how socio-spatial relations of power, such as gender, are mutually constituted and embedded within environmental programs such as REDD+.

ENVIRONMENTAL GOVERNANCE OF RECREATIONAL HUNTING IN RUSSIA

Author: *Kathleen Braden**, Seattle Pacific University, United States

Keywords: environmental controversy

Abstract: Illegal recreational hunting by oligarchs and other elites in Russia has exacerbated inequalities in terms of traditional access to hunting resources and, at the same time, contributed to commodification of nature and poor environmental governance of wildlife management. This paper, based on an article to be published 2015 in the journal *Eurasian Geography and Economics*,

documents cases of impunity among powerful violators, raises questions about injustices toward rank-and-file hunters, examines flaws in new hunting regulations adopted in 2012, and examines the increasing privatization of lands formerly open for recreational hunting to all citizens.

SPATIAL CONFLICTS IN A BUFFER ZONE OF NATIONAL PARK: A CASE STUDY FROM SLOWINSKI NATIONAL PARK (NORTHERN POLAND)

Author: *Michał Jakiel**, Jagiellonian University Institute of Geography and Spatial Management, Poland

Keywords: buffer zone, protected areas, spatial planning, urbanization

Abstract: Buffer zones are created to enhance the protection of valuable nature areas. They are generally situated around national parks and nature reserves and they are created for preserving them from external hazards like negative environmental or human influences. However, areas adjacent to national parks are also attractive for tourism industry and holiday homes. It may cause dispersed development, land use changes, landscape fragmentation and biodiversity loss. A case study of a protected area in Poland, Slowinski National Park, is undertaken for this research. The park is located on the Baltic coast. Annually is visiting by 300 thousand tourists. Local residents and wants to develop a tourist infrastructure and create new terrains for buildings. It results in a conflict with the administration of the Park.

The main aim of the paper is to assess a spatial planning situation in the buffer zone of Slowinski National Park. Therefore spatial planning documents developed at local and regional scale were analyzed. The main problems are urban sprawl and a lack of integrated planning policy. The research allowed also to indicate areas where conflicts between planned land use and nature conservation occur. These issues are mainly connected with housing development and tourism infrastructure.

DEBATES OVER NATURE: THE QUESTION OF ENVIRONMENTAL CHANGE IN HUNGARIAN SCIENCE

Author: *Ferenc Jankó**, University of West-Hungary, Hungary

Keywords: environmental change, environmental controversy, Hungary, science history

Abstract: In this paper I will analyse several scientific controversies in the Hungarian science history concerning the change of the environment: debates over the relationship between coal mining and karst hydrological problems in the Transdanubian Mountains, water quality and water level of the Lake Balaton, the relationship between water regulation and climatic changes in the Great Hungarian Plain, building of hydropower-plants and environmental change in the Szigetköz region. The aspects of the investigation will be the following: the participants (or rather knowledge communities) in the debates, their position, their scientific background: viewpoints, arguments and resources; the historical-societal context shaping the controversies; and the ruling and clashing ideas about environmental change and nature. After summarising these controversies I draw some conclusions and highlight the parallels between the debates of the past and the present as well.

“NATURE HAS GONE WILD” – PERCEPTIONS OF LANDSCAPE CHANGES IN HUNGARY

Authors: *Noémi Ujházy**, Eötvös Loránd University, Department of Environmental and Landscape Geography, Hungary; *Marianna Biró*

Keywords: landscapes, nature conservation, nature-society dichotomy, perception

Abstract: The meaning of the word “nature” can be much less natural in some contexts than one might think – certainly not “natural” in the sense of “obvious”. Our aim is to compare perceptions of two different social groups, namely local farmers and scientist-conservationists, about landscape change processes of a 20x30 km territory in the central part of the Duna-Tisza Interflow, Hungary. Our area of study is a very diverse, mainly agricultural, rural one, which also includes protected areas of the Kiskunság National Park. Based on previous studies, we focused on dominant ecological trends such as land abandonment, spontaneous and deliberate afforestation, transformations of wetland habitats, spread of adventive plants and wild animals etc. Each of these trends was somehow a change of naturalness: the question is how, according to the obviously different points of view of the different groups of people.

We conducted semi-structured interviews about these landscape trends and about their subjective evaluation among the two studied groups. The interviews asked for both quantitative (Liker-scale type data) and qualitative type of data (personal narratives in response to open ended questions – hence the quotation in the title), so in the analysis, in addition to statistical tools, we also applied content analysis to the different narratives as well.

P18 GEOGRAPHY AND SPORT

Organizers: *Alexandru Ilieș, Gábor Kozma*

Location: Room B

SLOT1

Chairs: *Alexandru Ilieș, Gábor Kozma*

Schedule: Wednesday, 2 September, 15:00–16:45

THE POSSIBILITIES FOR THE SCIENTIFIC RESEARCH INTO THE RELATIONSHIP BETWEEN SETTLEMENT AND SPORTS

Author: *Gábor Kozma**, Department of Social Geography and Regional Development Planning, University of Debrecen, Hungary

Keywords: sport

Abstract: The scope of tasks organised and performed by settlements and their leaders has continuously broadened since the beginnings of time. Initially, the leaders of settlements were primarily expected to provide for the safe operation of the settlement, the creation of the conditions of commerce, as well as the administration of justice. However, from the 18th and 19th centuries onward, settlements started to play an increasingly important role also in the areas of education, social and healthcare services. In the 20th century, parallel with the spread of the notion of the welfare state, activities related to the useful spending of free time have gained importance, among which, in addition to culture - primarily in the most recent times – sports has played an increasingly significant role as well.

The aim of this paper is to explore the possible areas of researching the relationships between settlements and sports. Further developing the tetrahedron model of the settlement, the truncated triangular pyramid model has been created, the two bases of which are the natural environment and the municipal administration, while the sides are the infrastructural, economic and social spheres. The paper will present the results of and further possibilities in sports-related research aimed at each of these spheres, as well as the sports-related characteristics of the interactions taking place along the edges of the truncated triangular pyramid.

SPORTS INFRASTRUCTURE IN POZNAŃ, POLAND

Author: *Emilia Bogacka**, Adam Mickiewicz University in Poznań, Poland

Keywords: Poland, Poznań, sport, sports infrastructure

Abstract: Sports infrastructure plays a significant role in the development of professional sports and amateur sports, as it is the base of physical activity. Therefore a complex analyses on sports infrastructure objects, local and supralocal, is needed. The supralocal sports infrastructure object is a sports infrastructure object used for professional sports competitions at least at the level of national championships. A local sports infrastructure object is a sports infrastructure object used in amateur sports by the local community. The research will be based on Poznań, 0,5 million city in Poland which hosted EURO 2012, and will cover the following issues: 1) distribution and type of supralocal sports infrastructure in Poznań, 2) structure type of local sports infrastructure in Poznań and 3) sports infrastructure in Poznań in the light of strategic documents.

THE IMPACT OF POST-SOCIALIST PERIOD TO THE ROMANIAN SPORT STADIUMS ACCORDING WITH ECONOMIC SUPPORT

Authors: *Alexandru Ilieș*, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT, 1 University St., 410087, Oradea, Romania; *Ștefan Baias*, University of Oradea, Department of Geography, Tourism and Territorial Planning, 1 University St., 410087, Oradea, Romania; *Sorin Buhaș*, University of Oradea, 1 University St., 410087, Oradea, Romania; *Jan Wendt*, University of Gdansk, Poland

Keywords: economy, geography, sport, stadiums

Abstract: The stadiums built in the socialist period were supported by important economic entities in all major cities of Romania. The difference between urban and rural areas was significant in according with the industrialization level of the city. Typically, these were rural small-scale agriculture and related activities. The competition between cities is reflected strongly in size, architecture and quality of these buildings. The fall of the socialist system and thus closing a significant number of economic units and the disappearance or degradation of the stadiums depends on its. The study propose spatial analysis in Romania which reflects the evolution of this dualism found in dependency relationship between industry and sports branch. It is noted in this sense the mining and machine building industry. Thus, this study will reflect the status of the infrastructure directly related to sporting and financial supporter of community and impacts upon the community in the locality that holds / held such infrastructure.

THE SPATIAL DYNAMIC OF FIVE-A-SIDE FOOTBALL IN FRENCH CITIES

Author: *Vincent Gaubert**, France

Several new sports and physical activities have emerged in the last decades. One of these, five-a-side football, has established itself as the second most popular form of football in France. By introducing numerous innovations, this specific variation of the football game has rapidly created an alternative form of sport consumption, alongside the offer of the Federation Française de Football (FFF). Five-a-side football's growth generates meaningful transformations at different scales, especially in urban spaces. It justifies

a further reading of sport and physical activities' offer, including their locations. This presentation highlights the geographical logics of emergence and construction of five-a-side football and the distinct location of its facilities which differs from the federal one. These facilities which are mainly built around catchment area and are better adjusted to modern urban spaces' issues reassess the place of sports and physical activities. Indeed, a geographic spread of five-a-side football within cities has been drawn by private operators and involves some areas where no other forms of football has occurred until then. This positioning seems to be successful and has since led the FFF to adapt its offer and develop partnerships with five-a-side football companies. Conducted with analyses of the FFF files, completed by interviews with the main actors of the FFF and of five-a-side football commercial operators, this presentation explores the evolution of the football diversity and displays its consequences within the cities.

THE CIES FOOTBALL OBSERVATORY: HOW GEOGRAPHY HELPS US TO UNDERSTAND FOOTBALL PLAYERS MARKET

Authors: *Loïc Ravenel Ravenel**, Centre International d'Etude du Sport, Switzerland; *Roger Besson*; *Rafaelle Poli*

Keywords: big data, football, map, migration, observatory, sport

Abstract: Established since 2005, the CIES Football Observatory (<http://www.football-observatory.com/>) is a research group within the International Centre for Sports Studies (CIES). Its research team gathers academic geographers who work on sport for several years. Its aim is to provide top level services for football governing bodies (federations, leagues, clubs, media), producing and exploiting a vast amount of data on football players. Indeed, with globalization of sport, new issues emerged these last years: new regulations for transfers, definition of sporting nationality, preservation of national training organization, emergence of new markets.

The aim of this proposal is to show how geographical issues on football – and sport in general – have become the specificity and identity of the CIES Football Observatory. 15 years ago, such works were not considered as responsible because sport didn't appear like a "real" geographical object. Fortunately, this has changed both for academics and sport governing bodies.

The contribution of geography can be expressed into several points. First, the comparative approach inherited from quantitative geography led us to the concept of "observatory". It permits to produce clearly defined indicators comparable in space (between countries) and time (depending on the season). Secondly, the observatory is designed using the theoretical framework of international migrations, and particularly the circulatory approach. It considers players as migrants for whom the movement is an element of their career progression. Finally, mapping is still a great tool for revealing such spatial information. In this context, we developed a dynamic mapping adapted to the trajectories of players.

PADIŞ - A TOURIST OASIS IN THE HEART OF APUSENI MOUNTAINS

Authors: *Alexandru Ilieş**, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT, 1 University St., 410087, Oradea, Romania; *Ştefan Baias*, University of Oradea, Department of Geography, Tourism and Territorial Planning, 1 University St., 410087, Oradea, Romania; *Ovidiu Gaceu*, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT, 1 University St., 410087, Oradea, Romania; *Dorina Camelia Ilieş*, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT, 1 University St., 410087, Oradea, Romania; *Ioana Josan*, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT, 1 University St., 410087, Oradea, Romania; *Mihaela Ungureanu*, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT, 1 University St., 410087, Oradea, Romania; *Mihai Vlaicu*, University of Oradea, Department of Geography, Tourism and Territorial Planning – CSAT, 1 University St., 410087, Oradea, Romania

Keywords: karst, karst phenomena, karst plateau, karst systems, Padiş, tourist routes

Abstract: This paper aims to highlight the tourism potential of the most spectacular karst complex in Romania – Padiş – a tourist oasis located in the heart of the Apuseni Mountains.

The Karst Plateau of Padiş is located in the central-western side of the Apuseni Natural Park and it is distinguished in the Romanian karst landscape by the density, variety and uniqueness of the karst forms and phenomena developed in its perimeter, most of them are declared natural monuments. The high number of its original images, some iridescent as in ice caves, others like limestone reliefs on the walls, made Padiş, one of the most attractive karst areas of the country and of Europe.

Padiş is famous for its numerous scientific superlatives:

- the highest density of karst forms and phenomena/km² in Romania;
- the most beautiful, diverse and complex karst landscapes in the country;
- the deepest pit of Romania (V5, 653 m);
- the most grandiose karst complex in Europe (Cetăţile Ponorului/Fortress of Ponor);
- the highest portal caves in Romania (Cetăţile Ponorului/Fortress of Ponor, over 70 m);
- the widest opening of a cave in Romania (Coiba Mare, 74 m);
- one of the longest underground confluence cave systems in the country (Zăpodie - Peştera Neagră/Black Cave, 12 048 m);
- the only authentic poly in the Romanian karst (Poiana Ponor);
- one of the most important paleontological sites in Europe, which preserves remains of the cave bear (Onceasa Cave);
- four of the five permanent ice caves from Romania located at about 1 100m altitude (Gheţarul de la Barsa/Barsa Glacier, Gheţarul Bortig/Bortig Glacier, Focul Viu/Living Fire and Gheţarul Vârtop/Vârtop Glacier) and the list could go on. All these karst superlatives invite to hiking, relaxation and admiration, being valorized through a complex network of tourist routes.

At the end of the paper are presented some proposals on how to promote the tourism and sustainable development of this area.

Organizers: *Róbert Györi, Charles Withers*

Location: Room F

SLOT1

Chair: *Róbert Györi*

Schedule: Tuesday, 1 September, 17:15–19:00

INSTRUMENTS AND THE PRACTISE OF GEOGRAPHY: THE CASE OF THE ROYAL GEOGRAPHICAL SOCIETY, C.1830-C.1930

Author: *Charles Withers**, Geography, University of Edinburgh, United Kingdom

Studies of the mutually constitutive relationships between geography and exploration focus either upon the biographical (“the who” - the explorer him or herself), the cognitive content of the exploration (“the what” - what was explored and when, with what effect), or upon the historiographical (“the so what” - how exploration contributed to the development of the geographical sciences, or how geography in the form of exploration was complicit in the construction of empires and of colonial domination by metropolitan powers). The instruments involved in the geographies of exploration (“the how” of geography’s practical undertaking in the service of empire) are seldom examined. This paper offers an instrument-centred analysis of the connections between geography, technology and exploration with reference to the role of the Royal Geographical Society (RGS) in the century from 1830. Particular attention is paid to two manuscript sources in the RGS: “Instruments Lent to Travellers”, the associated “Catalogue of Instruments”, and to instructional rhetoric concerning the development of a technical facility amongst would-be explorers. The paper will show that the development of an instrumentally-based exploratory culture within the RGS was uneven in character and pace. Because instruments themselves failed in the field - ran slow, broke down, had to be re-calibrated - we must be wary (the paper argues) about the epistemological and authoritative claims made by the explorers themselves. If this is so, then we must be similarly cautious about the claims made by geographical societies to have developed geographical knowledge on behalf of empires.

DISCOVERING OTHERNESS, EMPOWERING THE NATION: ITALIAN GEOGRAPHICAL SOCIETIES AND THEIR DUAL PATH

Author: *Matteo Proto**, University of Trento, Italy

Keywords: colonialism, first world war, geographical societies, Italy

Abstract: In comparison with other similar European institutions, the Italian Geographical Society appeared on the scene very late. Founded in 1867, for three decades at least the Society has been almost totally controlled by the politicians and by the army. During this period its main objective was the study and the exploration of African territories, according to the governmental strategy to establish a colonial empire for the young national state.

In partial conflict with the Geographical Society of Rome, academic geography convened in the Società di studi geografici, founded in Florence in 1895 and devoted to the advancement of independent scientific research. Bound to the legacy of the Risorgimento age and in particular to the role of the Italian Society for the Advancement of Science, the Florence society aimed to explore homeland and the relation between humanity and the environment, maintaining a role not influenced by politics. In this context geographers contributed to the study but notably to specify the territorial understanding of the state. Afterwards also this society was involved in colonial survey. Collected dataset and produced cartography were useful to help overseas lands military and economic conquest.

During and after the First World War both societies supported nationalistic aims and got involved in the project to redeem Italian newly-conquered lands, thus pre-empting the overcome of geography by the state, which occurred under the fascist regime.

THE THOUSAND-YEAR-OLD HUNGARIAN STATE BORDERS: BORDERS OF A NATION, A STATE OR AN EMPIRE?

Author: *Zoltán Hajdú**, Centre for Economic and Regional Studies of HAS, Hungary

Keywords: state constructions, state history

Abstract: The Hungarian state, the Hungarian state territory, the constitutional structures and its political borders raised different issues in different historical periods. and they formed different national and historical geographical complexes of issues. Starting from the 12th century Hungary had a developed an empirical structure. The neighbourhood of the given Hungarian state was constantly changing due to transformations of power in Europe. The historical Hungarian Empire collapsed in 1526. Hungary turned to be divided between empires. Starting from 1530's and especially from 1796 the analysis of the country's political structures and borders had become an essential topic in the development of the Hungarian geography. The Compromise of 1867 with Austria resulted a very special “co-empire” status of Hungary. After the defeat in the First World War Hungary turned to be a “small country with great History”.

MAPPING HUNGARY'S ORIENTAL OTHER: HUNGARIAN GEOGRAPHERS AND THE COLONIAL PROJECT IN THE BALKANS, 1908-1918

Author: *Steven Arthur Earl Jobbitt**, Lakehead University, Canada

Keywords: Hungary, knowledge production, mental mapping

Abstract: In October 1908, the Austro-Hungarian Empire annexed Bosnia, a former Ottoman possession that had been jointly administered by the two empires since 1878. Beyond intensifying the Habsburg colonial project in the Balkans more generally, the annexation of Bosnia heightened Hungarian “imperial” interests in the region as well. Triggered in part by fears that the newly acquired territory in the south would upset the already delicate balance between Slavic and non-Slavic speakers within the empire, Hungarian interest in the Balkans was also fueled by nationalist fantasies of imperial expansion, and by a long-standing fascination with the Balkans as Hungary’s proximal Oriental other. Focusing on field diaries and published reports produced by geographers working with the Hungarian Geographical Society, the Oriental Committee [Keleti Bizottság] of the Hungarian Academy of Sciences, and the Balkan Bureau [Balkán Iroda], this paper employs postcolonial perspectives to identify and interrogate the interconnected Orientalist fantasies and colonial aspirations that informed geographical studies of the Balkans between 1908 and 1918, and which also played an important role in the construction of Hungary’s late-imperial geographical imaginary.

THE IMPERIAL SHIFT OF SOVIET HEGEMONY AND COLD WAR POLITICS IN HUNGARIAN GEOGRAPHY: THE “MARKOS SCHOOL” OF ECONOMIC GEOGRAPHY

Author: *Zoltán Ginelli (Gyimesi)**, Eötvös Loránd University, Department of Social and Economic Geography, Hungary

Keywords: Cold War, economic geography, György Markos, Marxism-Leninism

Abstract: As in many European countries, in Hungary, World War II brought a permanent rupture in the production of geographical knowledge, as geography experienced the collapse of a national-conservative regime and a shift towards a Sovietized communist regime. Elucidating the transformative period of 1945–49 and the 1950s is key to understanding the scope and effects of this regime change in the production of knowledge. This decisive break meant the dissolution of the Hungarian Geographical Society in 1949, and its problematic resurrection from 1952. This paper will follow the sociology of scientific knowledge to conceptualize the effects of the Soviet empire’s science policy on restructuring the local agendas and knowledge production of Hungarian economic geography, with a specific focus on local conflicts, rhetorical battles and strategies of intellectual power struggles between the new cadres and the “old guard”. In this context, the study will aim to unravel the biography of György Markos, who was summoned at this time as a political journalist to become an economic geographer and high-ranking member of the Society. His “revolutionary” and controversial personality is rather intriguing, as he was prominent in enforcing the adaptation of Marxist-Leninist ideologies, and with his students consolidated a narrowly empirical economic geography, which had a long-lasting effect even into postsocialism. This study builds on previously untouched archival materials in order to decipher the untold story of this decisive period, and to situate these local intellectual and political agendas of Hungarian economic geography in a wider Cold War context.

SLOT2

Chair: *Charles Withers*

Schedule: Wednesday, 2 September, 08:30–10:15

GEOGRAPHIES OF POWER: THE CASE OF THE GESELLSCHAFT FÜR ERDKUNDE ZU BERLIN

Author: *Ute Wardenga**, Leibniz-Institut für Regional Geography, Leipzig, Germany

Keywords: geographical epistemology, geography and war, knowledge production, state power

Abstract: The Gesellschaft für Erdkunde zu Berlin (Berlin Geographical Society) belongs to the oldest Geographical Societies in Europe. It was established already in 1828, and from the 1871 foundation of the German Empire at the latest, the Society claimed national leadership in the production and communication of geographical knowledge. The talk will, for the period between 1914 and 1940, examine various practices through which the Society and its members attempted to gain political influence in various social and scientific contexts. The focus will be on three points: The establishment of “Commissions on Regional Geography” during World War I; reactions to the spatial reorganization of Europe after 1919; and the Society’s function as an arena of National Socialist propaganda after 1933.

THE COMMUNIST LEADERSHIP OF THE HUNGARIAN GEOGRAPHICAL SOCIETY AFTER THE HUNGARIAN SOVIET REPUBLIC, 1919 – SIN, PENANCE AND ABSOLUTION

Author: *Róbert Györi**, Eötvös Loránd University, Department of Social and Economic Geography, Hungary

Keywords: Hungarian Geographical Society, political ideology, science history

Abstract: In the spring of 1919, shortly after the communist takeover in Hungary, the old leadership of HGS (like the leadership of all Hungarian learned societies) was replaced by a new one loyal to the new system. However, when the short-lived Hungarian Soviet Republic collapsed in August, 1919, the first committee of the Society’s reinstated board decided to investigate the collaboration with the previous regime. To make the case more delicate, one of the sinners was the renowned meteorologist,

member of the old board, Antal Réthly whose professional legitimacy was beyond question. Reading the protocols of the well-documented investigation it gradually unfolds that, the heated climate of the political turmoil notwithstanding, this case could not be reduced to a simple political condemnation. While the Hungarian Geographical Society and its leadership supported the counter-revolutionary, nationalist-conservative regime of interwar Hungary, old ties, friendships and scholarly reputations might have helped geographers to transcend ideological barriers. In my paper I want to show that, though connections between ideology and politics certainly mattered, on a personal level the story is much more complicated.

“THOSE UNCONSCIONABLE MAPS OF EMPIRE”: THE AMERICAN GEOGRAPHICAL SOCIETY AND THE POLITICS OF IMPERIALISM, 1916-1945

Author: *Mike Heffernan**, University of Nottingham, United Kingdom

Keywords: American Empire, American Geographical Society

Abstract: This paper provides a critical commentary on the American Geographical Society's geopolitical activities between the wars. Particular attention is paid to the Society's attempts to promote a more internationalist and assertively imperial vision of the United States as a modern, 20th century power that could challenge and eventually replace the global authority of older European states in seemingly terminal decline. This was a contentious view, to be sure, and was fiercely rejected by more isolationist elements within American political culture. Drawing on unpublished, previously unknown archival sources, the paper considers the Society's apparently disinterested and objectively scientific attempts to influence American policy towards Europe and the Middle East during and immediately after World War One, and towards Latin America during the 1920s and 1930s, the latter exemplified by the Society's Map of Hispanic America, a 20-year compilation project to devise a new cartographic representation of the Americas south of the United States.

TERRITORIAL REVISION AT THE SERVICE OF EUROPEAN CIVILISATION: THE FOREIGN LINKS OF A CONCEPT IN INTERWAR HUNGARIAN GEOGRAPHY

Author: *Ferenc Gyuris**, Eötvös Loránd University, Hungary

Keywords: civilising mission, geography and war, Hungary, mobilities of knowledge, territorial revision

Abstract: After being traumatised by the immense territorial losses resulting from the 1920 Trianon Peace Treaty, Hungary's political leaders, alongside a vast majority of Hungarian scholars, considered territorial revision as a major goal. Geographers played a crucial role in this process by creating a wide array of arguments to provide scientific justification for reestablishing the pre-1920 boundaries. One of these arguments presented the Carpathian Basin as the scene of a grandiose civilising mission, with Hungarians destined to bring civilisation to other nationalities who were, from the Hungarian perspective, “at a lower cultural level”. The geopolitical struggles of interwar Hungary were thus projected onto the European level by implying that the fulfilling of Hungarian revisionary goals should be of crucial interest to the entire continent, and to the flourishing of European civilisation. Similar to many other notions serving the revisionist aims of Hungary, however, this concept was not a uniquely Hungarian one, but it strongly relied on a language and methods already present in several national geographies in Europe and North America. Hence, the aim of my paper is to reveal the international roots of this narrative, to analyse the way it arrived in Hungarian geography in bits and pieces from various foreign geographies, and to compare the concept with its counterparts in other countries during and after World War I.

THE AIMS OF THE BELGIAN GEOGRAPHICAL SOCIETIES, FROM THEIR FOUNDATION TO THE EVE OF THE FIRST WORLD WAR

Authors: *Christian Vandermotten**, Université Libre de Bruxelles, Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, Belgium; *Henri Nicolai*

Keywords: Belgium, colonialism, geographical societies

Abstract: Belgian geographical societies were born during the last quarter of the XIXth Century. Moreover their scientific pretensions, their aim was to contribute to the building and the reinforcement of the national feeling, to support the commercial expansion and to contribute to the building of a colonies. Framed by some University professors and general officers, their members were mainly issued from the petty bourgeoisie, civil and military officers, teachers, etc. Through some documents coming from the archives or the publications of these societies, the communication will present how they assert the national identity through the exaltation of the beauties of the country or through launching inquiries with the concourse of teachers; how they encourage explorators, if not paying for the explorations, due to a lack of money, at the difference of the main French and British societies; how they produce first-hand informations on the external markets; and how they will be involved in the debates between King Leopold II, the Belgian government and the colonial companies about the future of the Independent Congo State, which will only become Belgian Congo in 1909.

Organizers: *Rene Matlovic, Piotr Pachura*

Location: Room D

SLOT1

Chair: *Rene Matlovic*

Schedule: Tuesday, 1 September, 08:30–10:15

THE SPACE IN KNOWLEDGE PRODUCTION

Author: *Piotr Pachura**, Częstochowa University of Technology, Poland

Keywords: knowledge production, space, transformation

Abstract: Different spaces as economic, social, cultural increasingly interpenetrate in contemporary world. Simultaneously, many actors must balancing between the locality and the global world. Still the primary paradigm of contemporary reality is the knowledge creation and development and its conscious transfer or spontaneous diffusion for example knowledge spillovers. The aim of the presentation is to show the importance of space in the process of creation and diffusion of knowledge. Multidimensional understanding of space will be presented - in terms of physical space, social and cognitive.

CREATIVE CITIES AND THE HIGHER EDUCATION INSTITUTIONS IN SLOVAKIA

Authors: *Vladimir Ira**, Institute of Geography of the Slovak Academy of Sciences, Slovakia; *Marta Garitan*

Keywords: creative cities, creative industries, higher education, Slovakia

Abstract: Cities have significantly invested in their higher education infrastructure and creative economies in the past two decades. Institutions of higher education have been used as a means of urban regeneration, cultural, social, and economic development. This article engages with the current research and a debate about the creative cities and the importance of higher education institutions in contemporary cities. In the frame of theoretical and methodological input the paper points to the issue of formation of the creative-knowledge sector and that of creative cities. It draws attention to the specific position of the biggest cities in Slovakia with higher education institutions ensuing from the analysis of the higher education sector, the share of economically active population working in creative industry of the total economically active population, analysis of creative industries and the comparison with the overall situation in Slovakia. A new understanding of the dynamics of the creative sectors and the interactions with higher education institutions needs to be implemented. This should be the new challenge for researchers wanting to investigate the role of higher education in creative urban environments.

KNOWLEDGE NETWORK FORMATION FOR INNOVATIVE STUDY PROGRAMMES IN HIGHER EDUCATION

Authors: *Jürgen Brünjes**, German Centre for Research on Higher Education and Science Studies, Germany; *Eva Vögtle*, German Centre for Research on Higher Education and Science Studies, German Centre for Research on Higher Education and Science Studies Germany

Keywords: higher education, innovation, knowledge production

Abstract: In recent years, higher education institutions (HEIs) have increasingly developed new and innovative study formats such as work-based learning, short-cycle programmes, e-learning, blended learning and massive open online courses. While studies on other research sectors have shown how network structures emerge between companies and research institutions for the purpose of generating product and process innovations (see for example Broekel and Hartog 2011, Ponds et al. 2007, Scherngell and Barber 2009), there is a lack of evidence whether such organisational innovation networks also exist for the purpose of developing new study programmes, how they are structured and what determines collaboration within these networks. In this article, we analyse a network of HEIs in the field of new study programmes and explore what determines collaboration and closeness within this network. The network we analyse consists of 52 German universities and universities of applied sciences that receive public funding for the development, evaluation and implementation of innovative study programmes of academic continuing education. Drawing on the literature on different dimensions of proximity that are known to be able to enhance interactive learning and innovation between actors and organisations in innovation networks (Boschma 2005), we analyse determinants of collaboration with discrete choice models and determinants of closeness within the network with ordered logit models. Our initial results indicate that the usually dominating influence of geographic proximity in innovation networks is very limited. On the contrary, thematic and institutional proximity appear to be important determinants of collaboration.

UNIVERSITY RESEARCH AND DEVELOPMENT STRATEGY AS A MECHANISM FOR REGIONAL DEVELOPMENT IN SLOVENIA

Author: *Lucka Lorber**, University of Maribor, Slovenia

Keywords: innovation, knowledge production, knowledge-based economy, territorial cohesion

Abstract: The effectiveness of economic is based on knowledge-based innovative technologies where the key advantages are fast transfer of results of both base and applied research. The driving force for these changes is development of new technologies, equipment, materials and products that are interesting to the market. Basic research is the domain of the universities and the specialised science and research institutes. When it comes to applied research, the economy steps in. The coordination between scientific institutions and the economy is handled by the politics on all levels. Thus, we can talk about the triad of University – Economy – Government. In order to accomplish its research mission, the University of Maribor has adopted the R&D Strategy with primary goal: fostering a creative environment encouraging academic freedom with the purpose of promoting sustainable development and outstanding scientific achievements, ensuring greater visibility of UM and contributing to the development of the region and Slovenia. The strategy is directed to facilitating the transfer of scientific achievements into practice. Innovative Open Technologies, a regional development project, is a key mechanism for implementing R&D strategy. Fostering a symbiotic relationship between universities, other research organizations, the economy, support and development organizations as well as local communities through open innovations and technologies. Encompasses three interconnected parts: innovation, infrastructure and content. EU regional policy is an investment policy. It supports job creation, competitiveness, economic growth, improved quality of life and sustainable development. Slovenia would like to follow this strategy, provide polycentric regional development and social cohesion.

EFFECTS OF THE HUNGARIAN HIGHER EDUCATION FACULTIES OF HEALTH SCIENCES ON THE SETTLEMENTS – CASE STUDY: PÉCS-DEBRECEN

Authors: *Zsuzsanna M. Császár**, University of Pécs, Hungary; *Roland Hegedűs*, University of Debrecen, Hungary; *Károly Téperics*, University of Debrecen, Hungary; *Tamás Á. Wusching*, University of Pécs, Faculty of Sciences, Doctoral School of Earth Sciences, Hungary

Keywords: high skilled migration, higher education

Abstract: The twenty-first century transformation processes set higher economic role for the higher education institutions. As a result of the transformation generated by the socio-economic changes, the study of the economic effects of universities got into the focus of researches. Economics studies the knowledge transfer phenomenon, the long-term “knowledge effect”, by which institutions mediate information and innovation to the real sphere. From the aspect of social geography, the short-term “expenditure effects” are also considered important. Higher education teachers and students have substantial effects on the real estate market, sublet prices and retail sales of the settlement (and its environs), and on the consumption patterns and consumption in general. Our research focuses on the economic effects generated by foreign students. Their consumption patterns are studied through their expenditures. The empirical survey was conducted during the 2014/2015 academic year at two Hungarian universities offering medical training (Debrecen and Pécs). The statistically treated data are presented on maps to provide better clarity.

The more in-depth understanding of international student migration is also set as a goal in addition to the study of the economic effect on the settlements. Concentrating on medical training, we also look at the presence of the Hungarian higher education on the international education market.

The expected results of the research highlight the characteristics of the Hungarian healthcare training. They demonstrate the effects of fee pay trainings on the economy and structure of the settlements, the consumption patterns of foreign students and (with best estimates) quantify the revenues from it.

SLOT2

Chair: *Piotr Pachura*

Schedule: Tuesday, 1 September, 10:45–12:30

SMART PATH – CO-OPERATION OF UNIVERSITIES AND ENTERPRISES

Author: *Zoltan Dorogi**, University of Debrecen, Department of Social Geography and Regional Development, Hungary

Keywords: Hungary, innovation, knowledge production, smart city, spatial planning, territorial observation

Abstract: I research the innovation system of Észak-Alföld region, which is one of the less-developed areas in the European Union. Extensive relationships were mapped between academic and for-profit spheres. University of Debrecen acts as a co-ordinator, enterprises consider it as a bridge institute which connects different actors. In more thematic clusters university and special firms, corporations develop new products together. More than ten little spin-off firms were established by the university and its researchers to provide opportunity for knowledge spill over to the region

Thanks to close co-operations between universities and enterprises, innovation process is becoming more simple. These connections can easily be used as models during intensifying of the regional economy. In the less-developed regions it is much more difficult to reach critical mass, for example because of the lack of capital. Due to these facts, interdependence of universities and enterprises is also major. That is why specialisations were formed, which is mainly characterized by the division of labour. In addition to research, universities are more active in some other fields, for example networking, international market presence or project generation. Enterprises rather finance researches, bring market demand and participate in tenders.

Adaptations of triple- and quadruple helix models were started in the past few years, but special factors of the region are underused, formal and informal channels operate much less. In order to strengthen efficiency of competitiveness of regional economy innovative environments, production factors were created. In the next steps more involvement of regional policy is needed.

THE REPRESENTATION OF RESEARCH INSTITUTIONS AND THEIR LOCALIZATION IN THE CONTEXT OF DEVELOPMENT OF METROPOLITAN AREAS

Author: *Alena Prochazkova**, Czech Republic

Keywords: Czech Republic, knowledge production, metropolitan areas, post-socialist city, urban changes, urban planning

Abstract: Currently, there has been formed several new research centers around the city of Prague. They are funded by Academy of Sciences of the Czech Republic and Prague universities and partly financed by Ministry of Education and its Operational Programme Research and development for Innovations. The focus on their localization shows us that all of them were placed into the territory beyond the city. These are locations where is a need to build new infrastructure and where is an absence of local links and connections to other scientific institutions. This is greatly affected by the system of funding from the EU structural funds, which do not allow using the financial resources for such projects in the capital city of Prague.

The paper analyzes represented meanings of research institutions and their localizations within the metropolitan areas. It aims to answer the question what value, function, and ideology is represented in the discourse of localities of research. Is there any debate about the importance of such institutions and what are the main stones? Are there presented any strategies of their localization? The discourse analyses, of academic and media debate, aims to uncover the context of emergence of post-suburban structure, the relation between core and periphery and the importance of competitive ability for regional development.

CAPACITY BUILDING FOR ENHANCING DISASTER MANAGEMENT AND PLANNING: TOWARDS AN INTEGRATED SPATIAL PERSPECTIVE

Authors: *Irene Bianchi**, University IUAV of Venice, Italy; *Federica Appiotti*, iv University, Venice, Italy; *Francesco Musco*

Keywords: environmental hazard, higher education, partnership agreement, post-disaster recovery, spatial planning, urban vulnerability

Abstract: Disaster preparedness, management and planning emerged as a main challenge in geography and spatial management over the last decade. The development and implementation of disaster risk reduction strategies and of long-term post disaster measures require a significant educational effort, that should be based: (i) on enhancing inter-disciplinarity, thus promoting the acquisition of transversal competences in the fields such as human geography, spatial planning, urban economics, environmental science and sociology and anthropology; (ii) on fostering transnational co-operation, promoting the exchange of good practices; (iii) on promoting integration between Higher Education Institutes (HEI) and non-institutional bodies, and in particular Public Administrations (PAs), public and private bodies involved in disaster management, and research institutes operating in the broad area of disaster.

The creation of a network of academic and non-academic institutions would enable to operatively foster a shared knowledge, thus helping to fill the gap that currently exists between academics and subjects with competences in spatial planning and disaster management. The training of professionals capable of adopting a broad perspective towards urban adaptation and disaster risk reduction would also be beneficial at the institutional level, helping to integrate the highly-fragmented competence framework.

For these reasons a new and strategic higher educational partnership involving HEI academic institutions from different countries, as well as technical and administrative bodies, is going to be proposed for the Erasmus + programme. The partnership will create a platform for e-learning, promote innovative learning activities for students, researchers and teachers and support PAs in integrating disaster risk reduction in planning strategies.

THE DYNAMICS OF THE HIGHER EDUCATION SECTOR IN SLOVAKIA

Authors: *Rene Matlovic**, University of Presov, Slovakia; *Kvetoslava Matlovicova*, Slovakia

Keywords: dynamics, higher education, privat colleges, public universities, Slovakia

Abstract: The higher education sector is represented by the various types of institutions (for example: research universities, comprehensive universities, universities of applied sciences, colleges of higher vocational studies, colleges of liberal arts, community colleges, etc.). HE has a crucial position in the production of knowledge. There are private colleges, public universities and state universities in Slovakia. The main aim of the paper is to analyse the development trends and future challenges of higher education sector in Slovakia with peculiar attention on the divergent and convergent trends in the various groups of higher education institutions. We will deal with the trends in the following three groups: group of traditional public universities, group of the relatively young public universities and group of the private colleges. We are going to draw attention to the changes in the spatial and organisational structure of higher education and research institutions, to dynamics and production of new social and physical educational spaces and to analyse the educational and research performance of these higher education institutions in Slovakia.

P21 GEOGRAPHY IN ECONOMIC AND TERRITORIAL DEVELOPMENT POLICIES

Organizers: *Márton Péti*, *Géza Salamin*, *Markus Egermann*

Location: Room D

SLOT1 GEOGRAPHY IN DEVELOPMENT PLANNING – EUROPEAN PERSPECTIVES

Chair: *Márton Péti*

Schedule: Wednesday, 2 September, 08:30–10:15

GEOGRAPHIC DIMENSION IN THE PRACTICE OF PLANNING IN RELATION TO COHESION POLICY AND ECONOMIC POLICIES

Authors: *Géza Salamin**, The Central Bank of Hungary (MNB), Hungarian Society for Urban Planning (MUT), Hungary; *Márton Péti*, Reserach Institute for National Strategy (NSKI), Eötvös Loránd University (Eötvös Loránd University), Hungary

Keywords: cohesion policy, development policy, economic development, EU territorial agenda, partnership agreement, planning, territorial planning, territorial policy

Abstract: Nowadays there is a clear fact that more geographers are active participants of planning and policy development processes and these practitioners can experience that the general synthetic and complex territory oriented approach of geography is a demanded asset in public policies.

However it is only an assumption that geography is an essential key to manage complex problems of current times by integrated strategy, which is a keyword of current policies, such as economic growth policy, cohesion policy, climate change policy, etc. A certain geographic dimension – much beyond the so called regional approach – seems to get more and more attention.

In their presentation the authors illustrate the emergence of geography, identifying some approaches in their personal planning and policy development experiences, particularly in relation to EU policies: revision of EU Territorial Agenda, setting up Budapest Communiqué on European urban areas, planning for cross-border development operational programmes, Visegrád 4 territorial planning, Danube Strategy, Partnership Agreement and operative programmes 2014-2020, etc.

Special attention will be paid to economic development and to new cohesion policy post 2014, in which territoriality could gain an outstanding importance, with “real” geographic nature (notion of territorial cohesion, territorially integrated instruments, increased urban dimension, etc).

Geography is not only an important dimension of realizing sustainability, efficiency with integrated policies but also an increasingly attractive dimension for decision makers. Visualization of geography is an efficient way of communication related to planning and policy making in general. However real added value of such an ancient science should be much further investigated in systematic way.

THE ROLE OF GEOGRAPHY AND SPATIAL PLANNING IN SUSTAINABILITY TRANSITIONS

Author: *Markus Egermann**, Leibniz Institute of Ecological Urban and Regional Development, Germany

Keywords: city, EU policies, geographical research, sustainable development, transformation

Abstract: In recent years the European Union in the frame of its Regional, Environmental, Climate and Energy Policy has committed itself to a societal transformation leading to a more sustainable way of production and consumption. This so-called sustainability transition has become one of the “grand challenges” of the 21st century. Despite all efforts at the European level over the last two decades, recent ecological and economic crises witness the continuing dominance of unsustainable structures. Hence, it is questionable if the European Union’s policies until 2020 can make considerable difference in that regard.

This is especially true, since recent studies on sustainability transition suggest that a complex and systemic understanding of societal configurations and a cross-sectoral policy perspective is required to tackle this challenge sufficiently. While studies from other research traditions have highlighted system thinking, the role of politics as well as the importance of agency and institutions, they have failed to explain where sustainability transitions take place and why they play out differently in different places. This is where place-based approaches, geography and spatial planning come into play.

This paper introduces the state of the art in transition research. It will point out why European policies despite considerable efforts might have limited scope to reach its sustainability goals and highlights local sustainability initiatives for a sustainability transition. It will introduce city-regions as anchors of sustainable development and will outline why and how geographers and spatial planners can take up a leading role to manage sustainability transitions in European cities and regions.

KEY FACTORS FOR A SUCCESSFUL TERRITORIAL COHESION: CROSS-BORDER COOPERATION – HOW CAN SOME EU INSTRUMENTS CREATE A NEW GEOGRAPHY?

Author: *Mátyás Jaschitz**, CESCO, Hungary

Keywords: cross-border cooperation, cross-border planning, territorial cohesion

Abstract: Future of European cohesion policy is about to be prepared and discussed: concept of territorial cohesion is still crucial. This aim can only be achieved by the effective integrated development of the (inner) peripheral border areas. To serve this territorial continuity and connection better there are some innovative instruments for the planners and policy-makers.

The study demonstrates the position of border regions within the framework of EU development policies. Through the description of a special cohesion focused cross-border spatial planning methodology, it reveals the policy-driven opportunities and threats of (inner) European Union borderlands.

As a result of an innovative and efficient regional policy, the geography of border areas is changing very dynamically. The study also confirms how this social, spatial, economic, and political phenomena can be analysed by geographical methods and underpins the role and importance of geographers in this new European “space making” process.

LEARNING A LESSON FROM CLIMATE CHANGE: INCORPORATING THE IMPACTS OF CLIMATE CHANGE AND THE MEANS AND TECHNIQUES OF MITIGATION AND ADAPTATION INTO TOURISM EDUCATION

Authors: *Katalin Lőrincz**, University of Pannonia, Hungary; *Agnes Raffay*, Pannon University, Hungary

Keywords: climate change, education, sustainable tourism development

Abstract: Climate change is a key concept of sustainable tourism development and the concept itself bears similarities with sustainability: many people talk about it but only a few are aware of its multifaceted nature and the wide range of implications for the tourism industry. Therefore it is an urgent task to incorporate climate change issues into the curriculum of tourism higher education, potentially as a module on its own right but necessarily as a discussion topic within the fields of tourism geography, destination management, hospitality management, (tourism) marketing, strategic management just to name some of the most important ones.

There have already been many attempts to mitigate the impacts of climate change by the tourism industry and although these have been recognised and have considerable significance in the operations of tourism, we must ask where they have been taken up by tourism education and embodied within the curricula. We see similarities with the ways in which it took HEIs to fully recognise sustainability within the curricula with the slow adoption of the climate change issues. There is still a need to address the agenda within our classes and to engage the students – the managers of the future – with the importance of the measures being taken and the work that remains in the challenge to defeat climate change.

SLOT2 GEOGRAPHY IN DEVELOPMENT PLANNING – CASE STUDIES

Chair: *Markus Egermann*

Schedule: Wednesday, 2 September, 10:45–12:30

SPATIAL DISTRIBUTION OF LOGISTICS HUBS AND SITES IN ROMANIA

Author: *Csongor Máthé**, Babes-Bolyai University, Faculty of Geography, Romania

Keywords: catchment area, logistics, road transport accessibility, Romania, transportation infrastructure

Abstract: After Romania's European integration has been completed, this country is attracting even more attention due to geostrategic and economic reasons. In order to increase economic growth and living standards the development of transportation infrastructure is strongly required. Currently, the average speed of heavy goods traffic is still low, resulting long shipping times between the upper and middle centers. Logistics operation planning in this circumstance is very difficult task and the spatial distribution of logistics hubs and centers becomes extremely importance. This paper aims to determine the optimal spatial location of the major logistics hubs in Romania based on GIS research methods. As a consequence the catchment area of major cities and logistics parks has been defined based on travel time. Romania is investing mainly in motorway network, as well as in the rail-, air- and shipping transportation with the financial support of the European Union. This entails the appearance of new logistics hotspots: new motorway junctions and new intermodal transport hubs. The transport infrastructure development program has and will have serious impact on logistics activities.

SURVIVING CENTRES – DECLINING PERIPHERIES. CHANGING ECONOMIC POSITION OF LEADING COMPANIES ON NUTS 2 LEVEL IN HUNGARY

Author: *Tibor Tiner**, Geographical Institute Research Centre for Astronomy and Earth Sciences HAS, Hungary

Keywords: economic inequalities, Hungary, uneven development

Abstract: The economic development of NUTS2 regions in Hungary can be evaluated in different ways. Their economic potential can be measured by total revenues of leading companies operating on their territories, and then by the number, profile and profit of these firms. The results of an analysis show close correlation between their geographical position and success (or failure) in business. Analyses are going on the basis of financial and statistical indicators published by different institutions and firms electronically or in printed version. The study also deals with a few regional effects of economic crisis burst in 2008. The conclusion is that the economic crisis had very serious effects on both the annual revenues and profits of the top firms settled in different NUTS2 regions. But the process has been started still in the first half of the 2000s and led to surviving centres (e.g. Central Hungary) and declining peripheries for now.

IMPORTANCE OF SYNERGIES IN THE DEVELOPMENT OF PERIPHERAL REGIONS

Authors: *László Jeney**, Department of Economic Geography and Futures Studies, Corvinus University of Budapest, Hungary; *Pál Juhász*; *Attila Korompai*; *Gusztáv Nemes*, HAS, Hungary; *Ágnes Varga*

Keywords: efficiency, synergy, territorial development

Abstract: After the transition significant EU and domestic development aid have been spent to reduce the geographical development disparities within the European integration. In the case of the most peripheral rural areas these development efforts are not very effective, hampering the geographic cohesion.

This presentation is based on the preliminary results of an ongoing research titled with 'Realized and missed synergies in development policies – Effects of EU and domestic development aid in territorial framework' (financed by Hungarian Scientific Research Fund – OTKA K 101025). In this project we intend to explore the socio-economic effects of the last decade's development related policies and aid programmes in an exact geographic framework.

The Encs district is one of the most lagging rural areas in the EU, which can be characterised with a very scattered settlement system, remoteness from the centres, poor infrastructure and human resources, low living standard and extreme level of unemployment. The district is targeted by significant amounts of EU and domestic aids, programmes supporting local authorities, enterprises and civil society, however the backwardness and comparative disadvantages do not seem to decrease over time.

We claim the existence of synergies plays a crucial role in the efficiency of the territorial development policies. We are seeking the answer to the question what synergies have been realised/opportunities have been missed? Are there important mismatches between local and central initiatives? According to our findings the synergies between the development efforts should be appear on different levels: a geographic, a dynamic and a sectoral one.

THE LOCAL ECONOMIC DEVELOPMENT'S EFFECTS ON TOURISM – ON EXAMPLE OF TAMÁSI MICRO REGION

Authors: *Viktória Csizmadiané Czuppon**, Pannon University, Hungary; *Edina Sáriné Csajka*; *Tamás Molnár*

Keywords: local development, rural development, tourism

Abstract: The Hungarian National Public Employment Program has started to work on reduction of the number of unemployment rate in Hungary. HNPEP includes micro regional start-work program and in the most disadvantages micro regions it was one of the most effective program in order to reach some economic growth (). In this article we deal with local economic development (start-work programs included) and its impacts on tourism. Two from all of five classical local economic development's area are the social economy and tourism. The number of participant in this areas is increasingly influences the activity of the micro region and the economy as well.

There were 3 research camp in micro region where we have a defined and targeted value list roadmap based on internal strengths and opportunities. We have mapped the local food and non-food products and qualified workers that define local conditions across availability of local healthy foods, supplier bases, micro region's visibility and tourism.

We would like to introduce local economical and tourism developments in Tamási micro region and its impacts on each other. We would like to show what kind of risk and opportunity do some of people face in micro region? We have started the journey of local economic development in this micro region and want to present our research results.

P22 GIS-BASED GEOMORPHOLOGICAL MAPPING

Organizers: *Lucian Dragut*, *Szabolcs Fábán*, *Edina Józsa*

Location: Room H

SLOT1

Chair: *Edina Józsa* Discussant: *Florina Ardelean*

Schedule: Tuesday, 1 September, 08:30–10:15

LARGE-SCALE GEOMORPHOLOGICAL MAPPING: FIELDWORK VS. GIS – EXAMPLES FROM SLOVENIA

Authors: *Petra Gostinčar**, Karst Research Institute ZRC SAZU, Slovenia; *Rok Ciglič*, Anton Melik Geographical Institute ZRC SAZU, Slovenia

Keywords: karst, fluvio karst, geomorphological mapping, GIS, Lidar, landform classification

Abstract: The aim of our research was to compare the results of large-scale field-based geomorphological mapping and results obtained by the use of geoinformatic tools. Most studies on semi-automated geomorphological mapping focus on medium- or small-scale geomorphological maps, however not many focus on large-scale maps. The basic question was whether GIS-based geomorphological mapping is suitable for creating detailed geomorphological maps. In this study field-based geomorphological mapping was conducted at the scale of 1: 5000. Two geoinformatic methods were used in computer analysis. Firstly, original digital elevation model (DEM) and smoothed DEM were compared; in this way concave and convex areas were defined. Later on landforms on the basis of Surface Specific Points method were defined. Both analyses were conducted with 12.5 m and 1 m DEM.

In Slovenia different geomorphic systems are present (e.g. glacial, fluvial, karst). The analysis was conducted on selected examples where karst, fluvio karst and fluvial processes interact and therefore a variety of landforms is present. In our presentation we are focusing on the investigation of concave landforms.

Comparison of the methods revealed that results obtained with both geoinformatic tools are only partially useful when creating large-scale geomorphological maps. The software we used cannot define such a range of landforms as human interpretation with field work.

The paper is a part of PhD studies focused on geomorphology of karst on contact between limestone and dolomite bedrock.

HOW DOES THE AERIAL PHOTO SCALE AND THE DIGITIZING SCALE INFLUENCE THE RIVER BANK MEASUREMENT ERROR IN GIS?

Author: *Maciej Liro**, Jagiellonian University in Krakow, Poland

Keywords: digitizing error, geotification error, GIS mapping

Abstract: Information on the magnitude of the river bank measurement error is necessary to assess the magnitude of channel changes that may be identified during an analysis.

In this paper, the impact of the aerial photo scale and the measurement scale in the GIS software on the magnitude of the digitization (identification) error of a river channel bank was analysed. Repeat digitization of the same channel bank carried out in aerial photographs differing in the scale (1:7,500–1:30,000) with different measurement scales (1:1,000–1:10,000) used on each of them, showed that increasing the scale used for digitizing in the GIS software decreased the magnitude of digitization errors much more than similar increasing the aerial photo scale. The results of the analysis show that the selection of an appropriate digitizing scale in GIS software is an important factor affecting measurement error. The discussion of the results indicates that in some cases the calculation of the digitization error based on the aerial photo scale or the arbitrarily assumed error value may be higher than the real error which has occurred during digitization. The results obtained showed that the product of 0.25 mm and the scale used for digitizing in GIS can be a good approximation of the digitizing error which occurred in the aerial photos taken at the scale range of 1:7,500–1:30,000.

SPATIO-TEMPORAL VARIABILITY OF PIPES DEVELOPMENT IN A MOUNTAINOUS AREA UNDER A TEMPERATE CLIMATE (POLISH BIESZCZADY MTS., EASTERN CARPATHIANS)

Author: *Anita Bernatek**, Institute of Geography and Spatial Management, Jagiellonian University, Poland

Keywords: dynamics, geomorphometry, gully, piping, Poland

Abstract: Piping refers to the mechanical removal of subsurface soil by concentrated water flow, causing the formation of underground channels – pipes. The development of pipes may result in the collapse of soil surface and formation of blind (discontinuous) gullies. The significance of piping in gully erosion has been recognized quite well. However, research about dynamics of piping forms development is still limited. Therefore, this paper aimed at better understanding of spatio-temporal variability of pipes development by measuring pipes over 2 years using electronic total station (Topcon Hiper II). The measurements were performed twice a year (after spring thaw and after summer rainfalls) in 2013–2014. The longitudinal profiles of piping systems were repeatedly done. The survey was carried out in the selected piping systems in the Polish Bieszczady Mts. (Eastern Carpathians), where pipes develop in Cambisols. The research allowed to indicate the direction of pipes development and point out the most active element of piping systems. The development of selected piping systems will be continued up to the total collapse of pipes. The material is supplied to the piping systems primarily in a spring thaw, whereas is discharged during summer rainfalls.

SPATIO-TEMPORAL PATTERN OF BED SEDIMENTS STORAGE UPSTREAM FROM A LARGE DAM RESERVOIR. THE CASE OF THE GRAVEL-BED DUNAJEC RIVER AND THE CZORSZTYN RESERVOIR, POLISH CARPATHIAN

Author: *Maciej Liro**, Jagiellonian University in Krakow, Poland

In this study the impact of the base-level rising upstream from the Czorsztyn Reservoir (CR) constructed in 1997 on the gravel-bed Dunajec River (Polish Carpathian) on the pattern of bed sediments storage was reconstructed from the aerial photos and LiDAR data. The bed sediments area in CR backwater showed the above three-fold higher increasing than observed in the control section (not affected by backwater reservoir), in the first period after dam construction with large flood. The spatial pattern of the in-channel sediment storage was not related to the distance from reservoir but is explained by bank erosion and valley floor configuration. This study showed that reservoir-induced base-level rising promoted the bed sediments storage but spatio-temporal trajectory of this phenomena is related to the local valley characteristics and floods.

REGIONAL DIFFERENTIATION OF RURAL AREAS FOR TOURISM PURPOSES – THE CASE OF EASTERN SERBIA

Authors: *Jelena Ilija Basaric**, *Olgica Bakić*, *Aleksandra Gajic*

Keywords: differentiation, rural areas, GIS technology, tourism, Eastern Serbia

Abstract: Rural areas in Serbia are characterized with high level of diversification in terms of natural, demographic, economic and environmental characteristics. Contemporary tendencies in the spatial development require new approach to determination of rural areas at regional and national level. Natural predispositions of Eastern Serbia observed from physical and geographical standpoint indicate that this area have great tourism potential which is not sufficiently utilized. This paper will give an overview of existing approaches to identification and planning treatment of rural areas in Eastern Serbia. The application of GIS technology based on available data will be presented along with possible differentiation of rural areas in Eastern Serbia. Results may contribute to the improvement the existing methodology of determination of rural areas for tourism purposes. In that context are proposed some guidelines regarding future development of tourism in this part of Serbia.

SLOT2

Chair: *Anita Bernatek* Discussant: *Florina Ardelean*

Schedule: Tuesday, 1 September, 10:45–12:30

AN AUTOMATED APPROACH TO DETERMINE OPTIMAL PARAMETERS FOR GEOMORPHONS MAPPING

Authors: *Edina Józsa**, University of Pécs, Faculty of Sciences, Doctoral School of Earth Sciences, Hungary; *Adriana Sărășan*, West University of Timisoara, Romania

Keywords: flatness, geomorphons, SRTM, topographic grain

Abstract: Geomorphons is a cell-based DEM classification method for the identification of landform elements at a broad range of scales by using line-of-sight based neighbourhoods. However, to achieve the advantages of its robustness and efficiency several essential parameters need to be set optimally for the given area of interest. The characteristic of geomorphons map depends on the value of lookup distance defining the maximum scale of mapping, the skip radius to eliminate forms that are too small to be of interest and the flatness threshold to prevent the analysis of flat areas.

We introduce a new automated approach – implemented as a bash shell script for GRASS GIS – to determine these specific thresholds. This approach relies on the potential of the topographic grain to detect the characteristic local ridgeline-to-channel spacing. Calculating the relative relief value with increasing neighbourhood matrices it is possible to define a break-point where the growing of local relief encountered by the sample increases much less. The flatness threshold was defined based on the flatness ($\ln(S1/S2)$) value calculated according to the eigenvector method. Flatness is especially important with low resolution DEMs as even a smaller slope difference for a longer side cell means several meters of height difference.

The proposed method has been applied to freely available SRTM DSMs in two different terms of roughness: dune fields and hilly terrain. Tests provided satisfactory results for generic applicability. This approach has a significant potential for enabling objectivity and automation of landform mapping.

PALEO-HIDROGRAPHY OF THE DANUBE AND THE ROMAN BRIGETIO, NW-HUNGARY

Authors: *Balázs Nagy*, Eötvös Loránd University, Department of Physical Geography, Budapest, Hungary; *Márton Dedk**, Eötvös Loránd University, Hungary; *László Rupnik*; *István Viczián*, Geographical Institute, Research Centre for Astronomy and Earth Sciences of the HAS, Hungary

Keywords: Brigetio, GIS mapping, paleohidrography

Abstract: The purpose of our research is the hydrographical-geomorphological reconstruction of the Brigetio area of the Ripa Panonica (limes) - based on geomorphological research, GIS analysis and archeological sources.

What might be the reason for the area's relatively short inhabitability? What were the advantages that brought Romans here, what factors made their settling possible at that time, and why exactly at that time? Why has the area become uninhabited later?

The camp and the settlement of Brigetio were bordered by the Danube on the north and by an abandoned river subchannel on the south. Colonization of the former island could only begin after the deposition of Late Atlantic and Subboreal sediments. During the Early Subatlantic (Late Iron Age and the first two centuries of the Roman imperial period) levees in the direct vicinity of the Danube have been already inhabitable, as a result of dominantly lower and decreasing water levels (due to drier climate).

The settlement was built on the topgrounds of the island on the Danube's higher floodplain only on the wider levees and their remnants. The palaeo-Danube subchannel bordering the former island has already begun to filled up as a result of floodwaters overflow above the sediment plugs and between the levees. Data from our drillings and sediment profiles prove that 2/3 of the channel depth has already been filled with fine sediments: The Roman road crossing the channel (road pavement) was built on this basement.

NIGHTTIME LIGHT IMAGERY FOR MAPPING URBAN GROWTH IN UZBEKISTAN

Authors: *Indira Yuldasheva**, IfL Leipzig, Germany; *Daniel Mueller*

Keywords: GIS mapping, urban growth, Uzbekistan, nighttime lights

Abstract: Urbanization is particularly rapid in Uzbekistan, population increased during the last 60 years fivefold from around 6 million to 30 million. These tremendous changes have impacts on environment and also cause socio-economic challenges. Monitoring the spatial changes of urban development is therefore an important aspect and role of GIS, remote sensing is irreplaceable for managing these complex phenomena. Nighttime light products represent a strong evidence to evaluate human impacts on earth. This study used nighttime light imagery to explore the spatiotemporal patterns of urban growth in Uzbekistan from 1992 to 2010 using data of the nighttime light imagery. DMSP is the only satellite to study global economic and demographic changes speedily. We used a calibration method to correct images annually and then we applied threshold to extract urban growth. Results show that nighttime light enables to accurately map urban growth at country scale. Moreover, a combined analysis of lighted area and ancillary data revealed the possibility of using DMSP imagery to explore linkages to major economic parameters and showed high correlation. The relationship between lighted area and per capita income showed the highest correlation of 0.94 at the country level. Also, lighted area at the regional level has highly significant correlation value with GDP, ranging between 0.7 in case of Khorezm and 0.96 for Andijan region. Results provide a good spatial proxy for spatial distribution of urban population which is not possible to obtain from statistical sources. Overall, the findings present the great potential of DMSP imagery to map and monitor patterns of urban growth.

APPLYING ARCGIS TO CORRECTING THE COORDINATE SYSTEM'S ERRORS OF RURAL MAPS IN IRAN

Author: *Shahbakhti Rostami**, Payame Noor University, Iran

Keywords: GIS mapping, rural development plan

Abstract: Housing Foundation of Islamic Revolution is responsible to provide plans and maps for rural areas by which the existing status of villages are studied and their further growths are predicted. Such plans name "Rural Conducting Plans" that largely need

and use spatial data in their different phases. Introducing a new specification titled "The Procedure for applying Geographical Information Systems in Rural Conducting Plan" by the Housing Foundation and regarding it by consultants has revealed the importance and necessity of accuracy and precision of the spatial data to be applied in rural plans. The main referenced source in the mentioned Specification is a "Base Map" which is provided by surveyors' consultants before starting the main studies of villages. The base maps are drawn by Computer Aided Drafting (CAD) software to be delivered to the following rural consultants. Now, if there is any problems, especially coordinate systems errors, with the base map, it would be transferred to other parts of the plan. We have found several cases of base maps in western part of Iran that had serious coordinate problems such as replacing X and Y values by wrong numbers of Y and X values. Such a problem was the main reason for displacement of studied villages in somewhere too far from their actual coordinates (somewhere in Indian Ocean). Now, considering 1- impossibility of re-surveying, 2- unavailability of the Surveyor Consultant to correct the main CAD files and 3- availability of ArcGIS as the only option to correct the coordinate systems' errors, how can we fix the problem? The present paper has introduced two fast, free and publicly available methods based on ArcGIS software and Google Earth software with precise details to solve the problem. The success of the present study can be shared to solve the similar cases elsewhere.

P24 HUMAN-ENVIRONMENT RESEARCHES IN UNIFIED (?) GEOGRAPHY, THEORY AND PRACTICE

Organizers: *Zsolt Bottlik, Tamás Telbisz*

Location: Room B

SLOT1

Chair: *Tamás Telbisz*

Schedule: Wednesday, 2 September, 08:30–10:15

PALEOENVIRONMENTAL RECONSTRUCTION ALONG THE MIDDLE COURSE OF MUREŞ RIVER (ROMANIA) BASED ON GEOMORPHOLOGICAL AND AERIAL ARCHAEOLOGICAL SURVEYS

Authors: *Fatima Eisam Eldeen**, Eötvös Loránd University, Department of Physical Geography, Hungary; *Tamás Telbisz*, Department of Physical Geography, Eötvös Loránd University, Hungary; *Balázs Nagy*, Eötvös Loránd University, Department of Physical Geography, Budapest, Hungary; *Zoltán Czajlik*, Eötvös Loránd University, Hungary; *László Rupnik*

Keywords: archaeological sites, fluvial terrace, geomorphometry, GIS, paleoenvironment,

Abstract: Nowadays research of climate changes is one of the fastest-developing discipline in earth sciences. If we want to know more about the climate processes, which take place in our life, it is indispensable to recognize the characteristics and cycles of past changes. The landforms of Late Pleistocene and Holocene provide a very effective baseline for paleoenvironmental reconstruction.

The study area is the middle course of the Mureş River, located between the Apuseni Mountains and the Transylvanian Plateau (in Romania). The river formed a wide valley bottom with many alluvial forms. The location and characteristics of the valley made it an area highly suitable for human activities and transport routes.

For the geomorphological research, we mainly used the SRTM digital terrain model (30 m horizontal resolution), satellite images and topographic maps. Using the above data we can distinguish several terraces and various alluvial landforms. Aerial archeological survey of the study area started in 2009. During the last 6 years, several archeological sites were identified based on aerial images.

In our research, we try to get detailed information about paleoenvironmental changes in historical times by comparing the location of archeological sites with the position of river terraces and other alluvial landforms.

HUMAN-ENVIRONMENT RELATIONS IN HUNGARIAN GEOGRAPHY IN THE SECOND HALF OF THE 20TH CENTURY

Authors: *Margit Kőszegi**, Hungary; *Zsolt Bottlik*, Department of Regional Science, Eötvös Loránd University, Hungary; *László Mari*, Eötvös Loránd University, Budapest, Hungary; *Tamás Telbisz*, Department of Physical Geography, Eötvös Loránd University, Hungary

Keywords: dialectical and historical materialism, eastern block, Marxist-Leninist geography, nature-society dichotomy

Abstract: After the Second World War ideas, directions and research conditions had changed also in geography and in the whole scientific world. The human-environment researches got new places in the opposing countries of the Capitalist and Socialist Blocks. The scientific life of the Soviet Block was under the rule of dialectical and historical materialism of Marx and Engels. This ideology with postulating mutual relations of phenomena offered an intellectual direction to Eastern Block geographers how to think about nature-society dichotomy. The ideological basis of the Marxist-Leninist geography is the hard separation of humans and nature. Research was structured into two almost completely distinct units: physical and economic geography. These thoughts are also valid to Hungary, where the sovietisation of science and of geography took place by the end of the 1940s. In this paper we follow the specific aspects of Hungarian geography in the Second Half of the 20th century.

TEMPORAL CHANGING IN SPATIAL DISTRIBUTION OF MINING SETTLEMENTS IN EAST BORSOD COAL BASIN (NE HUNGARY)

Authors: *László Sütő**, College of Nyíregyháza, Hungary; *Balázs Adorján*; *Zoltán Dobány*, College of Nyíregyháza, Hungary; *Zoltán Dobány Jr.*; *Rózsa Péter**, University of Debrecen, Hungary

Keywords: antropogenic landscape forming

Abstract: Main aim of our study was to investigate contribution of anthropic impacts to landscape changes. One of the most elements of this study is tracing the process of human setting.

Settlements could be regarded as one of the most solid parameters reflecting human impact on the landscape. Settlements are built for centuries or more, however, pattern of their network is permanently changing according to modification of economic circumstances and change in number of population.

During the last two or three centuries, the settlements network pattern in the East Borsod Coal Basin has suffered some sweeping changes. Considering that mining has played a principal role of recent landscape character of the area, we introduce how the temporal change of coal mining was followed by spatial change of settlement network. To demonstrate this relationship topographic and land cover datasets based on GIS techniques were used. Finally, results were evaluated and interpreted in the frame of grades in the cultural landscape-forming process.

CLIMATE CHANGE AND RIVER HISTORY – MAN ON THE DANUBE ISLANDS IN HUNGARY

Authors: *István Viczián**, Geographical Institute, Research Centre for Astronomy and Earth Sciences of the HAS, Hungary; *János Balogh*, Geographical Institute HAS, Hungary; *Éva Kis*, Geographical Institute HAS, Hungary; *József Szeberényi*, Geographical Institute, RCAES HAS, Hungary

Keywords: archaeological sites, Danube, geomorphology, islands

Abstract: The interrelationship between man and the environment in different historic periods on the Danube islands was studied using data of archaeological sites. The study investigates the variability of fluvial dynamics affected by the Holocene climate changes and human impacts. The 250 km long river section between the cities Komárom and Paks was considered. It includes two big islands (Szentendre and Csepel Islands) and more than 50 smaller or formerly existing islands. On the islands 570 archaeological sites at 334 locations are known. The study of the smaller and lower lying islands in large rivers offers a new, less applied aspect of fluvial dynamics. The islands react sensitively to environmental changes; extreme floods can inundate their entire surface. Whether an island is suitable for human inhabitation is set by the flood risk (magnitude, length and frequency of high and low floods) of the site. The history of the islands intertwines with human history. Traces of human inhabitation and land use from Neolithic times can be found on their surfaces, despite the fact that they have always been limitedly suitable for inhabitation due to the floods. Yet they were repeatedly inhabited or used in the past, therefore historical data are readily available. There is a clear correlation between the climatic periods and the frequency of the sites. Our research concluded that the most favourable periods for settling are the transitions from humid to dry climate and the less favourable periods are the transitions from dry to humid climate.

SLOT2

Chair: *Tamás Telbisz*

Schedule: Wednesday, 2 September, 10:45–12:30

THE USE OF GIS IN THE STUDY OF KARST AND SOCIETY RELATIONSHIPS

Authors: *Tamás Telbisz**, Department of Physical Geography, Eötvös Loránd University, Hungary; *Zsolt Bottlik*, Department of Regional Science, Eötvös Loránd University, Hungary; *Zoltán Imecs*; *Margit Kőszegi*, Hungary; *László Mari*, Eötvös Loránd University, Budapest, Hungary; *Alena Petruvalská*

Keywords: Aggtelek, Apuseni Mts, depopulation, karst, Montenegro, possibilism

Abstract: One of the basic questions in geography is to what extent are the social parameters influenced by environmental settings. We study this question in the context of karst terrains, because karstlands have special morphological, hydrological, pedological and ecological features. The relationship of karst-geo-ecosystem and society is two-way. However, in this study, we examine only the positive and negative effects of karst exerted on humans living on karst terrains.

Nowadays, GIS-methodology opens up new opportunities to examine human-environment relationships in quantitative terms. An interesting approach is hypsographic demography, which explores how demographic parameters change according to relief categories. We applied this approach to the country of Montenegro, to Aggtelek Karst and Slovak Karst and to the Apuseni Mts (Romania). We took into consideration not only relief, but distance from rivers, lithology and other factors, too. Beside the use of GIS, we also created semi-structured interviews with local people in order to explore problems and the way of life of people living on karst.

Our results demonstrate that basic relief characteristics strongly determine the spatial distribution of population and settlements, the most important factors being in general the relative elevation, slope and distance from rivers. Karst terrains belong to the most rarely inhabited areas in all cases, however, their population density is influenced by the type of karst, too. Most karst landscapes are characterized by lower development, higher unemployment, ageing demography and emigration. Practically, the only „social” advantage of karst terrains is connected to their tourism potential (caves, gorges, preserved natural conditions).

PROJECTED TRENDS IN CLIMATE-CHANGE-RELATED HEALTH

Author: *Annamaria Uzzoli**, Centre for Economic and Regional Studies, HAS, Hungary

Keywords: climate change

Abstract: The phenomenon of global climate change is linked to human health and influence the increases the prevalence of non-communicable and infectious diseases. The climatic factors can directly or indirectly affect the social and environmental determinants of health with the result of health vulnerability. World population will be affected by climate change in complex ways in the future, but some communities will be more vulnerable than others.

The main aim of the paper is to describe health impacts of the climate change through projected trends in climate-change-related health. It is still worth explaining how adaptation is needed now in order to reduce current vulnerability to the climate change that has already occurred and additional adaptation is needed in order to address the health risks projected to occur over the coming decades. The territorial range of the paper includes global context with the specific focus on Europe.

The examined period covered by the years between 2030 and 2050 because WHO has a quantitative risk assessment of the effects of climate change on selected causes of death for this period. The statistical analysis contains the use of cause-specific mortality indicators, most of the data comes from WHO and EUROSTAT official databases. The discourse-analysis is examining the adaptation approaches at different scales because pro-active adaptation strategies, policies and measures need to be implemented by regional and national governments, by international organisations and by individuals. The synthesis is based on the documentation of IPCC.

GEOGRAPHY OF A LANDSCAPE – LANDSCAPE OF GEOGRAPHY

Authors: *Kitti Dubniczki**, CESCO (Central European Service for Cross-border Initiatives), Hungary; *Mátyás Jaschitz*, CESCO, Hungary

Keywords: landscape modelling, landscape planning, unified geography

Abstract: According to the European Landscape Convention, adopted by the European Council, “landscape” means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.

The basis of our research is a real area and landscape planning problem. Taking a holistic and interdisciplinary approach, which is in line with the European Landscape Convention, we have been looking for the answer to how society in a factual karst area divided by a border can explore the area's landscape potential in order to satisfy ecological, economic and social expectations. With the presentation of a new modelling method that we have elaborated in the hopes of successful planning, our practical approach might take the issue one step further from a philosophical point of view as well.

Once and for all, (though from a distinct perspective and despite of our original aim being different) we wish to contribute to the issue by underlining the legitimacy of neodeterminist narratives that aim for a unified geography

P25 IDENTITY, ETHNICITY AND SUSTAINABLE DEVELOPMENT IN POST-SOVIET SPACE

Organizers: *David Karácsonyi*, *Tigran Sargsyan*

Location: Room G

SLOT1

Chair: *David Karácsonyi*

Schedule: Tuesday, 1 September, 10:45–12:30

SPATIAL AND STRUCTURAL CHANGES IN ETHNICAL STRUCTURE OF BELARUSIAN POLESIE

Authors: *Liudmila Fakeyeva**, Belarusian State University, Faculty of Geography, Economic Geography of Foreign Countries Department, Belarus; *Alina Nemkova*

Keywords: Belarus, ethnic structure of Brest and Gomel regions, Polesie, Post-Soviet countries, regional development

Abstract: Border region is a special area that experiencing the greatest impact of neighboring countries in all spheres, and also has strong cultural, economic and social ties with surrounding countries. The ethnic structure of these areas is more complex and in Belarusian Polesie is presented mainly by Belarusians, Russians, Poles, Ukrainians, Jews.

The analysis of dynamics indices and shares of main ethnic groups by districts for the last intercensal period 1999–2009 shows that the number of Belarusians gradually reduced, as well as other nationalities, but Belarusians remain dominant in the ethnic structure, and their share is growing. The growth of the share of Belarusians in the ethnic structure is presented mainly in Zhlobin, Svetlogorsk, Rechitsa and Mozyr districts.

The most homogeneous by ethnic composition is the central part of the study region. The most significant group of Russians living in the eastern regions and major industrial centers: Gomel, Brest, where they account for more than 10%. Poles mainly live in the western part, patterns are generally dispersed. The greatest concentration of the Polish population is related to individual districts of Brest region: Malorita, Zhabinka and Brest. Ukrainians are also dispersed, however, Malorita, Pinsk, Brest, Bragin and some other southern areas of Polesie – the main areas with high share of this ethnoses.

In general, in Polesie there is an alignment of the ethnic structure and strengthening the position of titular Belarusian nation. The highest level of ethnic diversity is in south-west and south-east of the region, as well as for districts with major cities.

CHERNOBYL AND FUKUSHIMA – DEMOGRAPHIC TRAJECTORIES AFTER NUCLEAR DISASTER

Authors: *David Karácsonyi**, Geographical Institute, HAS, Hungary; *Hanaoka Kazumasa*

Keywords: demography, interviews, nuclear disaster, statistical analysis

Abstract: Hardly 25 years passed since Chernobyl accident and mankind had to face the aftermath of another nuclear disaster - Fukushima. Even though there were differences between Fukushima and Chernobyl with regard to triggers and technological details but the two events seem to be similar when environmental and social impacts are coming to the fore. After three years it became clear that evacuation from the Japanese region hit by the disaster is not an interim solution. Return of the local population is questionable even in the long run.

What are the long-term prospects of the region, what kind of social perspectives should be reckoned with? When making plans for the future a relevant issue to be defined numerically is prediction of demography trends (migration, natural reproduction).

Social trends having taken place in the Chernobyl region for more than quarter of a century represent a model to be considered for the assessment of perspectives in the Fukushima region. Besides the social experience accumulated and achievements reached during this period, demography data are concrete and objective quantitative indicators as far as the future trends are concerned. There have been three population censuses held since Chernobyl disaster; the data of which can be analyzed both on micro and meso levels and present adequate opportunities for modeling demographic development. In our opinion these models, even though with specific reservations, are applicable for the case of Fukushima as well.

NEW TERRITORIAL IDENTITIES ON THE SPACE BETWEEN BALTIC AND BLACK SEAS

Author: *Nataliya Stepanivna Koroma**, Taras Shevchenko National University of Kyiv, Ukraine

Keywords: East and Central Europe, junction geopolitical region, territorial identity

Abstract: The investigation of territorial and political organization of the society and concept of territorial identity form the object-subject essence of modern politico-geographical studies. All variation in organization of political life on the territories, regardless of their hierarchical level, always cause need for research of the identities. Ethnic, regional, national identities are important in forming territorial identities. Variety combinations of different identities create diversity of territorial identities.

The space between Baltic and Black seas is a good example of diversity territorial identities. Baltic-Black Sea region has experienced conflicts and has fallen under control of various geopolitical alliances; has always been a “junction” between the Europe and Eurasia. Therefore, this territory can be defined as a junctional geopolitical region with a unclear division between ethnic groups and religions, with imposition, interpenetration of cultures within them.

The time after finishing Cold War was a period of making new identities. The years “Cold War” gave rise to vague sense of unity among Western nations; joint sympathy to liberal democratic practices as tools that make possible collaboration became the main feature that unites Europe and one of the defining characteristics of new european identity. Most of East-Central European nations and the Baltic countries have been returned to Europe and old determinations like “east”, “post-communism”, “Post-Soviet”, “former member of the Warsaw Pact” are gradually obliterated. In the rest countries the process of forming territorial identity as key element of notions about position and the country's role in a globalized world is still in very active phase.

HOW DOES THE ETHNIC COMPONENT OF ONE'S RESIDENTIAL CONTEXT CHANGE AS A RESULT OF IMMOBILITY AND SHORT- OR LONG-DISTANCE MOVES: THE CASE OF ESTONIA

Authors: *Kadi Mägi*, University of Tartu, Estonia; *Maarten van Ham*; *Kadri Leetmaa**, University of Tartu, Estonia; *Tiit Tammaru*

Keywords: Estonia, ethnic segregation, migration

Abstract: This paper aims to merge the studies on residential mobility, long-distance migration and also immobility to demonstrate how different types of moves and immobility change the ethnic residential context of different ethnic groups. The case study region is Estonia, a country that has experienced an intensive immigration from other former Soviet republics after the WWII until the regime change in 1989/91. Two major ethnic groups in the country – Estonians and Russian-speakers – have different residential patterns in the country and also within the cities. This study observes the change in residential context of those, who have initially lived in the bilingual capital city, Tallinn. Russian-speakers form almost half of the city's population, and the levels of ethnic segregation have remained high since their arrival to the country. The main objective of this research is to find out whether the characteristics of the living environment remain similar before and after the moves, or is the change in place of residence a process that favours spatial assimilation of formerly separately living ethnic groups.

The research uses the longitudinal database based on the 2000 and 2011 Censuses. The main results demonstrated that migration remarkably shaped the ethnic segregation context while moving inside the city or leaving from Tallinn. The destinations of Estonians and Russians-speakers were different. Although for minority group the out-migration from Tallinn could bring along spatial assimilation since the share of minorities is lower outside of the capital city, Russian-speakers still mainly moved to the areas where they could find familiar ethnic environment.

TRADITIONAL ARCHITECTURE AND LANDSCAPES DESIGNED FOR DISASTER RISK REDUCTION IN JAPAN

Author: *Osamu Murao**, International Research Institute of Disaster Science, Tohoku University, Japan

Keywords: urban design, settlement, disaster life cycle, disaster mitigation, natural disaster

Abstract: Japan is one of the most disaster-prone countries in the world. Japanese people have struggled against many kinds of natural disasters such as earthquakes, tsunamis, heavy snow, typhoon, heavy rain, and floods, in the history as well as urban great fires caused by congested residential districts with small wooden houses. On these geographic backgrounds, Japanese people have constructed architecture and landscapes to reduce future disaster damage according to regional situations in many local areas. This presentation is to introduce some traditional architecture and landscapes designed for disaster risk reduction in Japan.

A basic idea of urban design and architecture for disaster management is based on so-called disaster life cycle, a scheme for disaster management consisting of four basic chronological stages: mitigation, preparedness, response, and recovery.

To mitigate future disasters by physical environment is most important. Basically, there are two types of manner to mitigate disasters, structural mitigation and land-use mitigation. The former manner includes 1) earthquake-resistant design, 2) fireproof design not to break out fire or not to spread fire around, 3) stilted houses to reduce damage due to floods, 4) seawall or levee to protect a coast, harbor, or riverside from the force of waves or flood, and 5) rock wall stone walls and heavy roof to prevent damage due to strong wind and salt from the ocean. In the other hand, the latter is exercised to avoid disaster by means of living far away from disaster prone area.

From the spatial point of view, it is not easy to distinguish between “preparedness” and “response.” Because, making place for activities to quickly respond after the disasters should be prepared before disasters. Shirahige Higashi Disaster Prevention Base might be an exponent of the space for preparedness and response. Recovery phase is related to several individual/public activities to support victims and affected governments. Several cases in Japan are to be presented.

CZECH-UZBEK ECONOMIC RELATIONS IN THE CONTEXT OF SOCIAL AND ENVIRONMENTAL RISKS IN POST-SOVIET SPACE: CHILD LABOUR, NATURE AND HEALTH ISSUES IN UZBEKISTAN

Author: *Gustav Novotný**, Geographical Department, Faculty of Sciences. Masaryk University of Brno, Czech Republic

Keywords: sustainability, territorial identity

Abstract: Central European countries, mostly the former Czechoslovakia, have been maintaining abundant commercial relations with Central Asia countries. After the fall of Communist regime, notable Czech industrial export continued but also a new products were included in the exchange, including the textile import originated from Uzbek cotton.

This paper focuses on the trade in cotton in Post-Soviet Central Asia and the role of subjects participating in the global production network. Then we discuss the unsustainable Soviet “heritage” - the consequences of intensive growing and cotton trade in Central Asia (primarily in Uzbekistan), including environmental (e. g. draining of the Aral Sea) and social (mainly the forced labour) issues.

Czech-Uzbek commercial relations are also included in the discussion as well as the author's personal experiences from the stay in the NGO organization “NaZemi FairTrade” and the negative reaction of Czech Embassy towards author's article about the child labour in Uzbekistan.

CAN MULTIPLICITY BE A BASE OF IDENTITY? COMPARATIVE ANALYSIS OF RUSSIA AND LATIN AMERICA (PROBLEM DEFINITION)

Author: *Tatiana Vorotnikova**, Institute of Latin America, Russian Academy of Science, Russia

Keywords: borderline civilization, ethnicity, globalization, human rights, identity, Latin America, modernization, Russia

Abstract: This research looks at the problem of identity in the multinational and multicultural societies of Russia and Latin America. It aims to verify the hypothesis that a principle of “multiplicity” in social and cultural identification generates a specific form of collective identity. The problem of self-identification is one of the core subjects of human coexistence. The study is based on the conception suggested by Russian scientists (J.Shemyakin, A.Akhiezer, A.Kofman) stating that both Russian and Latin American realities represent a borderline civilization that is built on the principle of multiplicity rather than uniformity. The main task of the project is to analyze the interrelation between different types of identity such as civilizational, cultural, religious, ethnic, linguistic, civil, spatial, temporal, etc. It is assumed that there is a hierarchy between these types where civilizational identity composes the deepest layer or a basis for this ranking. The keynote cultural wealth and deeply rooted collective values formulated by human society or community determine the plurality of social practices in everyday life, and fundamental understanding of these values is actualized on the civilizational level. This specific kind of self-identification process forms the background to cultural dialogue between ethnic, cultural and social groups, while manifoldness of identities is considered as universal value and a basic human right.

P30 LANDSLIDE HAZARD

Organizers: *Mihai Alexandru Micu, Mauro Soldati*

Location: Room J

SLOT1

Chair: *Mihai Alexandru Micu*

Schedule: Wednesday, 2 September, 08:30–10:15

HAZARD ASSESSMENT AND RISK MANAGEMENT OF SAN ROCCO AND MORTOLA LANDSLIDES (PORTOFINO NATURAL PARK, ITALY)

Authors: *Francesco Faccini**, University of Genoa, Italy; *Marco Giardino; Riccardo Lazzeri; Emanuele Raso*

Keywords: landslide, monitoring network, Portofino Park, rockfall, slope instability

Abstract: The western sector of the Portofino Promontory, where the villages of San Rocco and Mortola are located, has been historically affected both by slow and rapid landslides.

Although this area has been deeply studied since the Sixties, recently the slope portion located under the San Rocco and Mortola villages has shown a quick geomorphological evolution, visible through rockfalls and debris flows representing a risk for buildings and infrastructures.

The landslides are strictly correlated with typical causal factors, such as ground conditions, geomorphological, physical and man-made processes. Specifically, the landslide are influenced by the geomechanical properties and the high fracturing of the rock mass (weathered, jointed and with adversely oriented structural discontinuities), the undercutting due to sea-wave erosion, the neotectonic activity, the heavy rainfalls, the vegetation removal and the excavation of the slope toe for quarrying purposes.

These phenomena have brought public administration to take urgent measures for risk mitigation: the landslide monitoring activities conducted with inclinometric instrumentations and PSInSAR interferometry technique, show activity movements with an increasing speed heading to the coastline, where the slope is characterized by an high steepness.

A continuous monitoring system has been recently installed in the San Rocco village with the purpose of detecting any underground displacement above the main landslide scarps.

Landslide remedial measures should be adopted following the principle of the adaptive management.

In addition to localized works on the slope (eg. drainage, retaining structures, internal slope reinforcement), a coastal protection along the shoreline is considered critical for the risk mitigation.

ANTHROPOGENIC AND PHYSIC LANDSCAPE FORMING ON THE HIGH LOESS BANK

Author: *András Hágén**, Újvárosi Elementary School, Hungary

Keywords: aeolian loess, antropogenic landscape forming, global climate change, high coast, soil slip

Abstract: This environmental study concerns the causes of the sliding processes of the loessic high banks. In the study, the causes of the sliding processes of the high banks are divided into two major groups, natural and anthropogenic factors; though also a further factor is determined, the impact of deep structural movements. The two main factors can be further divided into four-four environment modifier impacts. An example for the anthropogenic factor is presented here through one of the best known case studies on collapses: the collapse of the Dunaszekcső loess high bank.

Due to the sudden storms occurring as consequences of the global climate change great amount of precipitation accumulates in the cracks formed by natural and anthropogenic processes and it results in collapse and slide. Currently, the fact of the climate change is generally accepted, that is the reason why it would be highly important to monitor loessic high banks.

THE INFLUENCE OF THE ANTHROPIC LAKES AS A MAJOR PREPARATORY FACTOR IN LANDSLIDE DISTRIBUTION IN MOLDAVIAN PLATEAU, ROMANIA

Authors: *Mihai Ciprian Margarint**, Alexandru Ioan Cuza University of Iasi, Romania; *Mihai Niculita*

Keywords: anthropic lakes, crown density, landslide pattern, Lidar, Moldavian Plateau, roughness

Abstract: Landslides are gravitational processes whose distribution is directly influenced by spatial and temporal dimensions of preconditioning, preparatory and triggering factors. In monoclinic regions, the morphostructure and the lithology are the most important preconditioning factors and they are responsible for the emergence of a veritable pattern of landslide distribution along the cuesta scarp slopes. While the preconditioning factors have a major regional influence, others factors disturb these models acting at local scale: the preparatory factors. Among these, in the north-eastern part of the Romanian territory, the Moldavian Plateau (24,803 km²), the anthropic lakes play a significant role in the occurrence of certain real landslide hotspots. In this paper we try to assess the influence of these lakes in the mass movement occurrence by using a detailed inventory of the lakes and landslides in the north-eastern part of the Moldavian Plateau – the Jijia Hills. The inventory of the lakes was carried out by using a large series of topographical maps (for the last 120 years), and remote sensing images. Landslide inventory was prepared using remote sensing images, including high resolution Lidar data. A strong relationship was revealed between the spatial and temporal presence of the lakes and a large series of geometric and geomorphometric features of the landslides, especially the crown density and relative altitude, and the roughness of landslide bodies.

CONVENTIONAL GEOPHYSICAL SURVEYS FOR LANDSLIDE INVESTIGATIONS: CASE STUDIES FROM ROMANIA

Authors: *Popescu Mihaela**, West University of Timisoara, Romania; *Alexandru Lucian Onaca*, West University of Timisoara, Romania; *Urdea Petru*, West University of Timisoara, Romania; *Raul David Șerban*, West University of Timisoara, Romania

Keywords: 2d resistivity, ground-penetrating radar, landslides, Romania

Abstract: A combination of geophysical methods 2-D resistivity (ERT) and ground-penetrating radar (GPR) were applied in order to gain some information about the thickness and the internal structure of several landslides from Romania. All the study areas covered a range of various slide types, from shallow slides to deep-seated ones, occurred in different zones of Romania (e.g. Lipovei Hills, Transilvanian Tableland) affected by landslide processes. In general, all the electrical resistivity data provide useful information on the geometry of the landslide body, lateral extension, but it also helped us to identify the sliding surfaces, to estimate the thickness of the slide material, highlight the areas with high water content and to approximate the volume of the body investigated in some areas.

The electrical resistivity data were acquired along the same profiles as the GPR surveys by using different electrodes arrays in order to surprise the internal characteristics of the investigated landslides.

All the 2-D ERT profiles were completed using GPR data but sometimes the GPR results were affected by strong signal attenuation and we couldn't obtain reliable information to compare them. Despite this disadvantage we have some good results for the application of GPR method on landslides, especially on shallow landslides when we were able to detect the main scarp or the main steps of the landslide. The tomograms and radargrams offers the possibility of correlating internal structure with detailed morphological elements as furrows, ditches, benches, mounds, and microdepression, achieving detailed images of the internal structure of each investigated landslide.

ENGINEERING GEOMORPHOLOGIC AND GEOPHYSICAL STUDY OF THE HIGH BLUFF OF THE DANUBE THREATENED BY LANDSLIDES AND COLLAPSES AT KULCS AND RÁCÁLMÁS (HUNGARY)

Authors: *István Viczián**, Geographical Institute, RCAES HAS, Hungary; *János Balogh*, Geographical Institute HAS, Hungary; *Éva Kis*, Geographical Institute RCAES HAS, Hungary; *Balázs Füsi*; *Ernö Prácer*; *Tímea Prodán*, Geodetic and Geophysical Institute, RCAES HAS, Hungary; *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary; *József Szeberényi*, Geographical Institute, RCAES HAS, Hungary

Keywords: Danube, high bluff, Hungary, Kulcs, landslide

Abstract: Kulcs and Rácalmás are located along the Danube where the edge of the Mezőföld (Central Hungary) rises with 50-70 meter high bluffs above the river. The settlements were built partly on the heaps of landslides at the side of the high bluff, where mass movements occur repeatedly since decades. Several significant rehabilitation projects have been executed in order to stabilize the area and protect the settlements. The purpose of our research is to explore the geomorphological, geological and anthropogenic factors responsible for these movements. Large scale geomorphological mapping has been undertaken, landforms and the presumed neotectonic events were jointly analysed. The location, magnitude, depth, tectonic lines and depressions of the known quakes have been marked on the geomorphological maps. Causes of landslide occurrences were studied by analysing the lithostratigraphical and hydrological conditions, the zones and directions of subsurface water flow. The geomorphological research has been completed with various geophysical analysis by applying traditional and innovative remote sensing and in situ methodologies, such as satellite radar interferometry (InSAR), LIDAR, geoelectric anisotropic investigations etc. to uncover the process of the movements. The different sedimentary sequences of the loess high bluff – especially the Pliocene red clay and the Pleistocene horizons of fossil soils – and the groundwater horizons related to these clayey layers play the main role in the emergence of the movements. The renewal of the movements can be attributable to anthropogenic impacts, subsurface waters, geomorphological forms and buried valleys determining the course of the groundwater flow in the northwest-southeast and north-south directions.

GEOTECHNICAL MAPS AS INPUT DATA FOR PHYSICALLY-BASED MODELLING OF SHALLOW LANDSLIDE SUSCEPTIBILITY

Authors: *Thomas Zieher**, Institute for Geography, University of Innsbruck, Austria; *Clemens Geitner*; *Gertraud Meißl*; *Martin Rutzinger*; *Arie Christoffel Seijmonsbergen*

Keywords: geomorphological map, geomorphological hazards, model input data

Abstract: Shallow landslides are common geomorphological phenomena on mountain slopes in many regions of the world. Different kinds of susceptibility models have been proposed for the identification of areas particularly vulnerable to this natural hazard. Amongst these, physically-based slope stability models require detailed knowledge on the regolith characteristics of the total area of interest. Depending on the selected model, area-wide geotechnical and hydraulic parameters are required at an appropriate scale. Detailed studies carried out on a regional scale (e.g. covering catchments of several tens of square kilometres) demands intensive data acquisition. To meet these requirements a geotechnical map was prepared for the Latarnser valley (Vorarlberg, Austria) in the course of an ongoing study on shallow landslide susceptibility. Construction of such geotechnical maps involves the

understanding of the catchment's complex landscape evolution, as it combines information on the spatial distribution of materials present and the occurrence of various (active or dormant) geomorphological processes. Geotechnically homogeneous units were identified, delineated and stored in a GIS. The information was based on integration of geological and geomorphological maps, remotely sensed data (including derivatives of airborne laser scanning (ALS) data, and aerial orthophoto time series) and reconnaissance surveys, geotechnically homogeneous units were identified and delineated. For each geotechnical unit the relevant parameters (i.e. angle of internal friction, effective cohesion, soil depth and hydraulic conductivity) were derived from field inspections, laboratory experiments, existing soil maps and respective literature. The resulting ranges for each parameter form the building stones of a framework for scenario-based modelling of shallow landslide susceptibility on mountain catchment scale.

This work has been conducted within the project C3S-ISLS, which is funded by the Austrian Climate and Energy Fund, 5th ACRP Program.

LANDSLIDE HAZARD ASSESSMENT IN THE CURVATURE CARPATHIANS AND SUBCARPATHIANS OF ROMANIA: BETWEEN NECESSITY AND UNCERTAINTIES

Authors: *Dan Bălțeanu; Marta Jurcescu; Gheorghe Kucsicsa; Dana Micu; Mihai Alexandru Micu**, Institute of Geography, Romanian Academy, Romania; *Ana Popovici; Veronica Zumpano*

Keywords: hazard, landslide, risk, uncertainty

Abstract: Landslide hazard assessment based on a proper susceptibility analysis plays a crucial role in developing adequate risk management strategies. Numerous recent research projects (international and inter-disciplinary) emphasized the importance of landslide hazard assessment and classification as vital steps within the more complex risk analysis-assessment-management-governance framework. Therefore, the ever-growing requests (coming especially from either local or national administration) of landslide risk studies without a strongly-fundamented hazard assessment could end up in a obtaining (and subsequently using in different legislative or applicative frameworks) unsuitable (or at their best, poorly suitable) graphic representations (sometimes improperly called risk maps). The necessity of adequate landslide hazard studies (a very complex approach, involving a proper apriori susceptibility assessment, a complete understanding of frequency-magnitude relationships, a confident determination of triggering factors and thresholds and their recurrence intervals) is emphasized by the large number of associated uncertainties induced by the very active human-nature interface (especially climate and environmental changes). The purpose of this paper is to highlight through case-studies (Buzău Carpathians and Subcarpathians) and simulation data and methods (ECHAM4 REMO5.7 RCM/IPCC A1B, CNRM/ECE/HC RCP 4.5/8.5, CLUE-S) the importance of different uncertainties that may arise before the obtaining of a reliable landslide hazard map.

P31 "MEZZOGIORNI" OF EUROPE – OLD AND NEW GROWTH GAPS OF EUROPEAN LESS DEVELOPED REGIONS IN THE YEARS OF ECONOMIC CRISIS

Organizers: *Vittorio Amato, Fabio Pollice*

Location: Room C

SLOT1

Chairs: *Vittorio Amato, Fabio Pollice*

Schedule: Monday, 31 August, 13:00–14:45

ECONOMIC DEPRESSION AND ENTREPRENEURSHIP IN DIFFERENT "MEZZOGIORNI" (OR SOUTHS)

Author: *Francesco Adamo**, Università del Piemonte Orientale, Geoprogress Onlus, Italy

Keywords: crisis, economic inequalities, entrepreneurship, globalization, knowledge production, periphery, soil moisture monitoring, uneven development

Abstract: This contribution assumes the theory of capitalism late developed (João Manuel Cardoso de Mello, Giorgio Fuà) and tries to verify its validity in the economic depression of Europe after 2007.

In particular, it tests the hypothesis that at the macroeconomic level the international gap shrank in favor of countries politically independent from the capitalist core countries and that they have already registered the economic take-off (as Bric). This reduction of the gap goes on, however, until when the prolonged crisis affects the same emerging economies, the more the more their economy is based on exporting.

Instead, the countries of Southern Europe bound by the rules of the Union, and for more with income levels and labour costs so high not to be competitive with countries of the Southern World, do not can take advantage of the delay of their capitalist development; so their macroeconomic gap growths respect to the capitalist core countries of Northern Europe.

This growth of the gap is even more evident at the regional level, between the developed and underdeveloped regions within a same country of the South of Europe. In these regions - as in the poorest countries of the Southern World - even if their macro economic gap you go accentuating in the crisis as well- show some positive development trends. Lack of external investment and difficulties in importing stimulate the nativity of local micro-businesses that - if favoured by specific policies, in particular against organized crime - makes possible the generation of a sustainable endogenous development.

THE GEOGRAPHY OF REGIONAL DEVELOPMENT AND COMPETITIVENESS ACROSS EUROPE. A FRAMEWORK ANALYSIS

Author: *Vittorio Amato**, University of Napoli Federico II, Italy

Up until the onset of the financial and economic crisis, the economic differences between European regions were being reduced, as “poorer” regions generally moved closer to “richer” regions through a process of convergence. However, the financial and economic crisis had a widespread effect on many regions, and the post-crisis period seems to show evidence of growing disparities, especially in some areas most severely affected by the crisis. In this context, the paper aims to provide a framework at the continental scale of the economic geography of Europe using the available data for the levels NUTS2 and NUTS3 both regarding regional economic performance and regional competitiveness.

MARGINAL POPULATION DENSITIES AND SOCIAL INDICATORS. THE CASE OF SALERNO

Author: *Teresa Amodio**, University of Salerno, Italy

Keywords: Marginality, Demographic density, Social indicators

Abstract: The research aims to address the issue of marginalization as an expression of deep-seated differences in growth in some areas of southern Italy. Specific attention is paid to the analysis of geographical contexts characterized by marginal population densities and with respect to which it intends to investigate the presence / absence of some social indicators for the age group most vulnerable. The research is conducted through a quantitative analysis methodology which aimed at obtaining data to be managed by the GIS platform, implemented with analysis of contexts of broader character. The analysis model that will attempt to develop, based on the identification of precise indicators for measuring profitability, will be applied in advance to the context of the province of Salerno. The final cognitive framework will be a valuable support for policy makers, so that they can proceed with a careful identification of needs of policy and the identification of relevant and appropriate development strategies.

CAMPANIA: THE REGION WHERE YOUNG PEOPLE WORK AND STUDY TO A LESSER EXTENT

Authors: *Giuseppe Luca De Luca Picione**, University of Study "Federico II", Italy; *Lucia Fortini*, University of Naples "Federico II", Italy; *Emanuele Madonia*

Keywords: economic inequalities, local governance, regional development

Abstract: According to a “technocratic approach”, what lies beyond the rhetoric of change and what is the impact of neo-liberal assumptions implemented by European decision makers in the absence of democratic legitimation? (Griessler, 2014). What is the conceptual and strategic role of social geographies and methodological research in the analysis of the gap of the less developed European regions? (Hargreaves, 2002).

Thinking through education is a preparatory part of an interdisciplinary approach capable of making discussions on the geographies of globalization and “knowledge society” meaningful (Hanson Thiem, 2009). This paper presents the evolution of the “social investment welfare state” (Giddens, 2014) through a case study on the educational performance of a less developed region of southern Italy: Campania.

The socio-economic environment of Campania, the territorial unit of this study (a region with a population of 5.9 million and a territorial extension of 13.671 km²), is analyzed using data from the Italian National Institute of Statistics (ISTAT) regarding the southern part of Italy (also called “Mezzogiorno”), and interviews with people living in the northern area of the city of Naples: students and teachers of all the local secondary schools and the unemployed people registered at the Employee Office “Napoli-Scampia”.

Campania is a region characterized by higher levels of poverty, lower scholastic performances, more disadvantageous labour market conditions, and an overall higher concentration of young people than the Italian average.

GEOGRAPHY OF KNOWLEDGE AND ROLE OF CLIENTS. EVIDENCES FROM THE ICT SECTOR IN SOUTH-EASTERN ITALY

Authors: *Luca De Siena**, Department History, Society, Human Studies - University of Salento, Italy; *Giuseppe Calignano*, Italy

Keywords: innovation, knowledge economy, South-Eastern Italy

Abstract: Innovation and knowledge are unanimously recognised as vital factors in the competitiveness of advanced economic systems and the European Union considers their strengthening as one of the main challenges for policy makers (see, among other reports, European Commission, 2008). Moreover, several studies stressed the importance for firms operating in peripheral areas - such as Southern Italy - to connect themselves to relevant international hubs actively involved in innovation networks (Lagendijk & Lorentzen, 2007; Fitjar & Rodriguez Pose, 2011). At the same time, various authors (i.e., Bettencourt et al. 2002; Auh et al. 2007; Möller et al. 2008; Trippl et al. 2009; Calignano & Quarta, 2014) highlighted the role played by clients in the co-production of advanced services and knowledge. Starting from these theoretical assumptions and by means of structured and semi-structured interviews (see Trippl et al., 2009) with several experts in the field (i.e., owners, managers and employees of well-established firms, founders of start-ups and spin-offs, founders and employees of academic firms, etc.) the aims of our research proposal are i) to reveal the geography of knowledge flows regarding the ICT sector in Salento (a marginally innovative sub-region of Apulia, South-Eastern Italy), and ii) to assess the relevance of near and far clients in knowledge exchange dynamics compared with other actors involved in innovation networks.

SOCIAL AND SPATIAL EFFECTS OF CURRENT CRISIS IN VISEGRÁD COUNTRIES: DIFFERENT PATHS AND IMPLICATIONS

Authors: *Dániel Kuttor*, University of Miskolc, Faculty of Economics, Hungary; *Tomasz Kossowski**, Adam Mickiewicz University in Poznan, Poland; *Zsolt Zaborcsák*, University of Miskolc, Hungary

Keywords: development, divergence, East Central Europe, economic crisis, economiccrisis, region

Abstract: Europe proved to be highly exposed to the effects of financial crisis. The open and export oriented East Central European economies have been especially affected.

Nevertheless the socio-economic and spatial imprints of the crisis differ among the East Central European countries (Visegrad Four, V4), such as the political reactions. In the field of crisis management Hungary “followed” a unique, unorthodox way. In the case of Poland, the country was seen as a “green island” and still hold positive GDP growth rate during the crisis. Polish financial and economic system seemed to be “robust” on negative effects of crisis, except of some problems on labour market and high public debt.

The observation, description and understanding of the European crisis mechanisms are still in forefront of socio-economic analyses. The V4 countries offer informative, particular instances to examine the phenomena within transition economies, on the periphery of the European Union. Extra attention is paid both to Hungary and Poland. These two countries were on two different paths of development during last years and these paths implied different results in a socio-economic policy.

In the paper the East Central European socio-economic situations are going to be analyzed and introduced during the time of economic downturn. The interaction between the macro and mezzo (regional) level decline is investigated. The research hypothesis concerns the social and spatial polarisation effects of crisis. The rapidity and extent of polarisation is tested. The NUTS-2 regions are going to be clustered by their crisis resistance and resilience.

SLOT2

Chairs: *Vittorio Amato*, *Fabio Pollice*

Schedule: Monday, 31 August, 15:15–17:00

IS THE FINANCIAL CRISIS REMAPPING EUROPE? SOME GEOPOLITICAL REFLECTIONS

Author: *Daniela La Foresta**, University Federico II, Italy

Keywords: East and Central Europe, economic development, enlargement, EU Cohesion Policy, financial crisis, regional inequalities

Abstract: The international economic and financial crisis that involved all the countries of the European Union with a negative impact on national economies, has highlighted the inadequacy of traditional European governance instruments. The collapse of the system, although has further increased traditional disparities between North and South and East and West, has unveiled innovative geopolitical options which seem to redefine the main axes of continental development. The next years could put in evidence a new socio-economic structure, influenced by the active presence of economic models, traditionally considered marginal and late, that will determine the necessity of redesign the map of the powers and responsibilities, according to alternative assumptions of balance. In this context, particular importance is assumed by the so-called “New Europe” countries which, though affected by the effects of the crisis that slowed down the growth process derived from EU accession, demonstrate, despite unresolved inhomogeneities and discontinuities, vitality and instances of renewal that, on the contrary, does not transpire with equal emphasis in the older EU member. In other words, on one hand “New Europe” countries move along a path of innovative development opportunities; on the other hand, the consequent convergence process moves, once again, the Union core, igniting new lights on the outskirts: the Eastern, addressed to Russian Federation and the Southern one, addressed to North Africa and Mediterranean area. This contribution attempts to reconstruct in a geopolitical perspective, european remapping processes by analyzing socio-economic convergence and divergence between “new” and “old” countries of the integration process.

THE DRIFT OF THE SOUTH OF ITALY. RECENT TRENDS IN THE “MEZZOGIORNO” ECONOMY

Author: *Fabio Pollice**, University of Salento, Italy

Keywords: regional development, regional inequalities, socia capital, souther italy

Abstract: In a purely geographic perspective the South of Italy is not an economic region, because, unlike a regional configuration, it lacks both territorial homogeneity and functional interaction. The South of Italy is rather a heterogeneous and little integrated mix, consisting of punctual realities which rarely take a supralocal systemic configuration. The same urban structure is weak and still underdeveloped; cities fail to perform their functions of organizing regional space and to act as nodal and propulsive centers for territorial development. The main weakness in southern economy lies precisely in the feebleness of the relational fabric and in the lack of relational thickening likely to generate external economies supporting the competitive growth of the set of firms. Considering that territory is by definition a complex relational space, the South of Italy looks like a region without territory. In a knowledge economy basing its development on the intensity of relational synergies, this feature becomes an irreversible cause of economic marginalization. Based on this premise, this article proposes an analysis of the economic competitiveness of the South of Italy, starting from structural drifts: GDP, employment, productivity, and coming to highlighting the direct and indirect causes underlying them. The paper focuses on those phenomena that more than any others hinder the economic and social relatedness of the region, such as a shrinking in the endowment of social capital and the diffusion of crime. The conclusion is that a policy for the development of the South of Italy can not be separated from measures for a social recapitalization restoring and strengthening the social relational fabric, making it a driving force of the regional economy.

MEDITERRANEAN DIET AND QUALITY PRODUCTIONS IN CAMPANIA

Author: *Mariagiovanna Riitano**, University of Salerno, Italy

Keywords: Mediterranean diet, Quality productions, Campania

Abstract: The Mediterranean diet is a set of skills, knowledge, practices and traditions ranging from the landscape to feed, by including crops, harvesting, fishing, conservation, processing, preparation and consumption of food. They are the people and territories, thanks to a uniqueness of historical-cultural and environmental factors, to represent a lifestyle footprint scientifically recognized as excellent. The Mediterranean diet, therefore, constitutes an important factor of marketing the territory as it is not reproducible and transferable elsewhere and, therefore, constitute a driving force for growth in many marginal areas of the South, and with particular reference to Campania. In the research presented here, starting from this basis, we proceed to create some maps on the distribution areas of the quality productions typical of the Mediterranean diet, able to highlight the special features of the production for the redevelopment of inland areas disadvantaged.

POLARIZATION AND URBAN SPRAWL IN SOUTH ITALY. THE CASE STUDY OF CATANIA

Author: *Luigi Scrofani**, University of Catania, Italy

Keywords: local development, metropolitan areas, urban regeneration, urbanization

Abstract: In this paper the author firstly considers the phenomenon of urbanization in Italy during the period 1991-2000 when there is a real "escape" from the biggest cities (Bari, Bologna, Catania, Cagliari, Florence, Genoa, Milan, Naples, Palermo, Rome, Turin and Venice). Instead, in the period between the 2001 and 2011 Istat Census data reveal an important change for some big cities of Central- Northern Italy which show a reversal trend that can be interpreted as an initial phenomenon of re-urbanization. In particular, this research aims at interpreting the potential or actual polarization or urban sprawl processes taking place in Southern Italy linking them to the performance of important urban functions. First of all the author chose to investigate the 12 cities in Southern Italy with more than 100,000 inhabitants (the cities of Bari, Cagliari, Catania, Foggia, Messina, Naples, Palermo, Reggio Calabria, Salerno, Sassari, Syracuse, and Taranto). Secondly, the gravitational and functional areas connected to the cities were defined on the basis of the boundaries of the Local Labour Systems (LLS) identified by Istat. The study has dealt with the demographic dynamics of all these Southern cities and particularly the case study of Catania. This city has been examined carefully by the further identification of parameters that consider the number of real estate transactions and the population density in the various urban districts to highlight the internal dynamics of Catania but also their effects on first and second urban belts. Finally the author explains the strategic functions that the city has and the possible influence area of these functions.

AN ANALYSIS OF THE DEBATE ON THE EFFECTIVENESS OF EUROPEAN COHESION POLICIES: THE ITALIAN CASE

Author: *Claudia Sunna**, Università del Salento, Italy

Keywords: development, EU Cohesion Policy, Europe, Southern Italy

Abstract: In the international framework the European cohesion policies initiative is a unique example of intervention policies designed for regional development. The continuity of cohesion policies since the late nineties allows to have a very detailed picture of data and reflections on this issue. The goal of this work is twofold. On one side it will be reconstructed the theoretical debate on regional cohesion policies that developed around the European Union programming experience and, on the other, it will analyze the debate on the effectiveness of cohesion policies, especially in reference to the Italian case. As for Italy is very widespread the interpretation that the European cohesion policies would be ineffective because of the inability of regional authorities to use European funding. Thus the economic gap between Italian regions would not be filled thanks to the policies of intervention. In this paper we propose to test this interpretation and to assess whether there is a conflict between the objectives of economic growth at the national/European and regional level. In other words, this paper will examine whether in Italy, which adheres to the Euro currency and which is under tight debt constraints, regional cohesion policies become ineffective due to the use of European funds for the ordinary expenditure of the State. In these terms, there would be a conflict of objectives between the European austerity policies and the regional development policies.

P32 MULTILINGUALISM, ETHNICITY, TERRITORY AND POWER

Organizers: *Laszlo Karoly Maracz, Patrik Tătra*

Location: Room F

SLOT1 ETHNIC AND LINGUISTIC DIVERSITY

Chair: *Károly Kocsis*

Schedule: Wednesday, 2 September, 10:45–12:30

GEOGRAPHY AND "DIVERSITY STUDIES"

Author: *Ádám Németh**, University of Pécs, Hungary

Keywords: diversity, ethnicity, nationality

Abstract: diversityAs Stuart Hall surmised, the "coming question of the 21st century" is how to fashion "the capacity to live with difference". Managing immigration and rapid diversification of the rapidly expanding cities in the "Western world" appears to become a

major challenge of the future indeed. In our region of “Zwischeneuropa” (a German parlance; countries from the Baltic states to the Balkan peninsula) as well as in Eastern Europe the status of historical minorities and traditional multiethnic areas has still remained open and unresolved. Little wonder that beyond conventional migration, gender, ethnic and racial studies, nowadays we are witnessing the birth of a new academic discipline called “diversity studies”, which field of social science concerned with “perceptions, configurations, inequalities, interactions, spatial manifestations, and policy responses surrounding social and cultural differences”. Presumably the first synthetic volume of this cross-disciplinary research topic was published in January 2015 (“The Routledge International Handbook of Diversity Studies”), edited by Steven Vertovec. The aim of my presentation is to summarize the research agenda and conceptual framework of this new, but perhaps lesser-known science field, which provide a uniquely broad set of tools for understanding diversity issues (from the point of view of cultural anthropology, sociology, social psychology, political studies etc. and, bring into focus rather the relationship between the “layers” of diversity). In my presentation I would like to show some potential “linking points” between human geography and diversity studies, because both could have an inspirational effect on the development of the other field of science.

GEOGRAPHIC DIMENSIONS OF MULTILINGUAL DIVERSITY IN THE CARPATHIAN BASIN

Author: *Károly Kocsis**, Geographical Institute RCAES HAS, Hungary

Keywords: Carpathian Basin, ethnicity, minority issues, multilingualism, Roma issues

Abstract: Despite the forced migrations, assimilation, and partly due to the immigration of foreign-born population there is any country in the the small „nation-states” of the Carpathian Basin (Croatia, Hungary, Romania, Serbia, Slovakia, etc) which could be called as ethnic-lingual homogeneous. In the former socialist countries of the region substantial ethnic-lingual changes occurred as a result of the radical economic, social and political transformation that took place since 1989, accompanied by the natural decrease of the population, an increasing spatial mobility (mostly emigration) and a changing role of the national-ethnic identity. During the last two decades in this area the most prominent ethnic-lingual changes were the accelerated decrease and assimilation of national minorities, the dynamic expansion of the Roma ethnic minority and an increase in the number of persons without ethnic-lingual affiliation. The paper analyses with special emphasis the geographic aspects of the lingual diversity and the process of “de-nationalisation” (e.g. in Hungary, Slovakia, Czechia) and of “nationalisation” (e.g. Croatia, Romania, Ukraine) based mainly on the ethnic-lingual data of the censuses that were taken in the eight countries of the region around 1991, 2001 and 2011. Similarly important part of the paper is the study of the results of the Roma demographic (and identity) boom on the changing ethnic-lingual patterns and the local neighborhood relations.

URBAN LINGUISTIC DIVERSITY: AN EXPLORATION OF LINGUISTIC MENTAL MAPS OF AMSTERDAM

Authors: *Nesrin El Ayadi**, University of Amsterdam, The Netherlands; *Virginie Mamadouh*

Keywords: globalization, mental mapping, migration, multilingualism, perception, public space

Abstract: This paper first discusses academic representations of urban linguistic diversity such as the representation of the city as a meeting point of cultures and languages, either a cosmopolitan inclusive harbour of diversity (the ideal city?) or an exclusive arena where language groups compete for the control of territory, and the representation of (ethnic) neighbourhoods as enclaves characterized by a specific, deviant linguistic landscape and a concentration of linguistically different inhabitants. It then discusses the situation of the city of Amsterdam, which is poorly documented as no language data is collected in administrative registers and there is no census. It presents an empirical study of the perception and the representation of the linguistic diversity of Amsterdam based on a survey among visitors of a festival celebrating multilingualism. Visitors were asked to name languages they thought were spoken much in the city and to identify the neighbourhoods on the map of Amsterdam where they thought these were mostly prevalent. Through these mental maps we examine the geographical knowledge and the perception that these visitors have of the ethnic and the linguistic composition of the different parts of Amsterdam. Hence, the study focusses on how people imagine and perceive the ethnic and linguistic diversity of the capital of the Netherlands and how they link it to specific neighbourhoods. As we shall see it also touches upon stereotypical imaginations of language, place and identity. as these representations are partly rooted in daily experience and partly in popular culture and media discourses.

THE ETHNOSOCIAL DIFFERENTIATION OF EUROPEAN CAPITALS: LONDON, PARIS, MADRID, BERLIN AND MOSCOW

Author: *Daria Shatilo**, Moscow State University, Russia

Keywords: ethnicity, migration

Abstract: Social differentiation has a long tradition in the study of cities. Large capital and global cities are distinguished by strong territorial and social polarization of the population, which is principally important in geographic research of intraurban structure changes (social, demographic, familial, cultural, educational, transportation, etc.). Global centers like London, Paris and Moscow are attractors of migrants: they become like a conflict arena for different ethnic and social groups. Berlin and Madrid are not the largest cities (except population) of their countries but they were taken as examples of new centers of immigration. For Moscow, it is especially important to reveal the dependence between prices of residential real estate and settlement pattern of immigrants, since the number of immigrants is increasing.

The study of the conflict causes was the most appropriate after the events in Paris (2005), in Moscow (2010), and in Berlin, Oslo, London (2011), which shown the migrants adaptation ineffectiveness and social and regional differences reduction. However despite this, the immigration inflow continues. The issue of immigrants settling in the Russian cities and its impact is still much less studied. Therefore, the experience of European countries is particularly important for Moscow, especially for migration processes management, negative effects mollification and common indicators of social stratification usage, because at present this problem becomes more obvious that require attention, monitoring and solutions.

SPATIAL DISTRIBUTION OF ROMA POPULATION AND THE PATTERN OF INCOMES IN HUNGARY

Authors: *János Péntes**, University of Debrecen, Hungary; *Zoltán István Pásztor*, University of Debrecen, Hungary

The objective of the paper is to summarize the results of a comprehensive survey of local governments on the number of Roma communities. Territorially extended ongoing ethnic change was detected comparing to the dataset based on the 2011 census. The spatial pattern of personal incomes represents almost an inverse distribution. The aims of the investigation are to discover the changes in the spatial distribution of the Roma population, to research the most characteristic processes of incomes in the light of the ratio of Roma population and to analyse the correlation between them.

SLOT2 CHANGING ETHNIC IDENTITIES

Chair: *Károly Kocsis*

Schedule: Wednesday, 2 September, 15:00–16:45

ETHNIC IDENTIFICATION RECONFIGURED: THEORIES INTERPRETING ETHNIC REALIGNMENT IN EAST CENTRAL EUROPE

Author: *Patrik Tátrai**, Geographical Institute, RCAES HAS, Hungary

Keywords: assimilation, ethnic realignment, ethnicity, hybridity, symbolic ethnicity

Abstract: Nation states of East Central Europe have always attached great importance to the ethnic composition of population measured by official censuses. For this reason their power-strategies have usually deliberately manifested in homogenizing effects. According to the censuses conducted after the fall of the socialism the demographic and ethnic dynamics went through significant changes. Beside the general trend of population decline, examples can be found both on homogenizing and, as a surprise, diversifying ethnic structure and ethnic processes in certain countries.

The changes in the ethnic structure represented by the population censuses can be explained by objective and subjective factors. In the present paper, it is argued that in most of the countries in the region ethnic realignment process is generated primarily by subjective factors; however, in some cases objective factors (such as natural population change and migration) or changes in the census methodology played a decisive role. The paper aims at, on the one hand, exploring those theories that can explain the role of subjective factors in the current dynamics of ethnic structure (e. g. assimilation/dissimilation, hybridity, multiple ethnic attachment, symbolic ethnicity, theory of ethnic realignment) and, on the other, presenting their applicability/validity on the various countries. Analyzing these theories we will receive an in-depth picture about how the power, the asymmetric relationship between majority and minority and the new forms of ethnic identifications influence the ethnic affiliations and, in general, the ethnic dynamics.

TRANSGRESSION, APPROPRIATION, ACCULTURATION: 20 YEARS OF DAYTON AND THE WAR OF LETTERS AND PLACE NAMES IN EMPTY SPACES

Author: *Damir Josipović**, Institute for Ethnic Studies, Slovenia

Keywords: Bosnia and Herzegovina, depopulation, economic inequalities, ethnic segregation, place names, state power

Abstract: Bosnia-Herzegovina, this masterpiece of ineffective involvement of the international community, especially Europe, is probably the most renowned remnant of the late Yugoslav federation. Being a bearer of the conflict between Serbia and Croatia, Bosnia-Herzegovina with its kaleidoscopic ethnic and religious structure had been a podium of a brutal war which forever changed the cultural landscape of the country. That the Dayton Peace Agreement stopped arm conflicts, was perhaps the most gyrating statement of past two decades. But from the 20 years perspective this well may be questioned since many hidden wars had emerged. Many of them stem from the utterly broad autonomy ceded to each side in the struggle. The article examines the ethnicity-specific politics of place names and the invention of ethnic traditions.

Considering the control over territory as a central goal of the war, the article examines the politics of spatial control through the concept of empty spaces. The author views the issue of the formal territory control as much as obsolete as well as symbolic. Through the analyses of depopulation, exodus, and resettlement, the reality of barren ground is revealed. The contemporary Bosnia-Herzegovina suffers a severe depopulation, especially in Republika Srpska, with very low rates of minority group returnees into areas of the ethnically differing majority group. Initial ethnic cleansing has been recently topped up with out-migration and emigration.

SCHOOL CHOICE AND ASSIMILATION: THE CASE OF SCATTERED ETHNIC HUNGARIANS IN SERBIA

Author: *Timea Trombitas**, University of Szeged, Department of Economic and Social Geography, Hungary

Keywords: assimilation, education language, ethnic identity, minority, scattered community

Abstract: The identity preservation of people applied by learning on their own mother tongue as a fundamental pillar in scattered territories has enhanced priority nowadays. To maintain and preserve the mother tongue education is an important task, since the everyday use of the Hungarian language is neglected, which intensifies the assimilation processes. In the Hungarian-scattered areas of Serbia parents for various reasons generally educate their children on the majority language, despite that the Hungarian-language education is insured.

This study aims to present the reasons why the Hungarian parents prefer majority language schools. The research is also to explore parents' and pupils' circumstances and decision of educating on Serbian-language. One of the main questions is what kind of family, cultural and micro community background the ethnic Hungarian parents in their enrollment practices have? What factors influence the choice of teaching language? The study highlights Serbian-language class students who came from mixed or ethnic Hungarian families. To answer these questions I used qualitative methods, data were collect through 29 interviews. In addition, I conducted interviews with parents and teachers also. The research area were Novi Sad and Sombor municipality centers, why there was possibility to learn Hungarian and Serbian language as well.

As a consequence, according to the research results numerous cultural, economic and familial factors play a role in the decision-making. Outside the linguistic point of view, the choice of schools are influenced by other requirements, such as the identity of teachers, tracking of family sample, spatial location of the school, and the parents' own negative or positive experience from his own school age.

ETHNIC PROCESSES AND IDENTITY IN THE WESTERN-PANNONIAN AREA AFTER 1989

Author: *Dániel Balizs**, Geographical Institute, Research Centre for Astronomy and Earth Sciences, HAS, Hungary

Keywords: Austria, gypsies, immigrants, Slovenia, symbolic ethnicity

Abstract: The growing importance of ethnicity can be felt in the entire Carpathian basin in the post 1989 era, like in the case of the above mentioned area that has been neglected in ethnicity-related studies so far. This research includes the historical territory of County Vas from the days of the Hungarian Kingdom. The multilingual area, populated by Hungarians, Germans (Austrians), Slovenians and Croats, has witnessed new kinds of ethnic processes (a phenomenon that is typical in other regions in and outside our borders): the inflow of South-Eastern European population into South-Burgenland, the growth of ethnicity on the Hungarian side of the border and the expansion of gypsies in the whole county. The peculiarity of the situation is that ethnicities increase their presence outside their settlement area. The ongoing linguistic assimilation indicates that the importance of mother tongue decreases within ethnic identity, and the elements of symbolic ethnicity come into prominence, a fact well reflected in the attachment to the traditions of the given community. This tendency characterises the ethnicities of this region at varying degrees. This study aims to represent the ethnic background processes of the study area, on the one hand, and also tracing the reasons for the above mentioned phenomena.

CHANGING IDENTITIES OF MINORITY COMMUNITIES AND ELECTORAL BEHAVIOUR. THE SPATIAL STRUCTURE OF HUNGARIAN MINORITIES IN SETTLEMENTS OF SOUTHERN SLOVAKIA IN THE LIGHT OF THE ELECTION RESULTS.

Author: *Farkas György**, Eötvös Loránd University TGF, Hungary

Keywords: assimilation, electoral behaviour, ethnic identity, minority issues, Southern Slovakia

Abstract: The results of last population censuses clearly outlined the significant trends of changes in number and proportion of Hungarian minority in Slovakia over the past twenty years. Among the numerous possible reasons of significant decrease, the unfavourable demographic processes and assimilation are assumed into the first ones. The degree of assimilation losses, weight and the role of its local perceptions, the regional backgrounds of its spatial disparities are, however extremely problematic. Nevertheless, the question of assimilation, of course, has a central place in the internal discourse of the Hungarian minority in Slovakia, emphasized the political debates about possible forms and ways of political representation in future. During the recent parliamentary and local governmental elections in Slovakia (2010, 2012) the political representation of Hungarian minority has undergone fundamental transformations. The major reason for unified political representation of the minority community, existed for a long time before, was now breaking up. The political structure of minority's representation had been divided, and the issue of local perceptions of assimilation processes has become a very important factor in political campaigns and communication because of heightened competition. Therefore, the geographical analysis and comparison of election results, the proportion and local weights of votes of minority Hungarians have growing importance for competing political parties. Through spatial analysis of the election results of ethnic Hungarian parties we may attempt the necessary research hypotheses for study the geographical processes of regional differences which may highlight the territorial aspects of assimilation processes.

P33 NEW AND EMERGING ELECTORAL GEOGRAPHIES: METHODS, PATTERNS, MOVEMENTS

Organizers: *Martin Šimon, Balázs Szabó*

Location: Room G

SLOT1

Chairs: *Martin Šimon, Balázs Szabó*

Schedule: Wednesday, 2 September, 10:45–12:30

A GEOGRAPHY OF THE RESULTS OF THE 2014 EUROPEAN ELECTIONS

Author: *Christian Vandermotten**, Université Libre de Bruxelles, Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, Belgium

Keywords: electoral behaviour, electoral geography, political parties

Abstract: The paper will present a geography of the results of the 2014 European elections, at the regional level and with comparisons to 2009. The cartography uses anamorphoses, avoiding the underestimation of the results of the main metropolitan areas. The paper proposes, on the basis of a theoretical discussion, a classification of the parties, allowing to group the whole set of the parties in five main categories: the leftist parties opposed to the present way of the evolution of the European building, divided between far-left and ecologist parties; the parties agreeing with the main trends of the European building, either social-democrats, or liberal, Christian-democrats and conservative; the parties representing the national establishments, but against a deepening of the European building and favouring strongly national preferences, like the British Conservative Party or the Czech ODS; the (far)-rightist, populist and/or nationalist anti-establishment opposition to European building. This last category have benefited from the strongest gains during the last poll, so that we will investigate more in depth on the geography of this evolution. We will also consider the geography of abstention. It appears the the national determinants remain dominant to explain the electoral geography of the European polls.

SPATIAL CHARACTERISTICS OF THE VOTING BASES IN WESTERN AND EASTERN EUROPE

Author: *Balázs Szabó**, Geographical Institute, RCAES HAS, Hungary

Keywords: electoral behaviour, electoral geography

Abstract: The party systems have converged in the Western European democracies for the last decades though each country has its own sociopolitical characteristics and election system. The spatial feature of the parties' voter bases has significantly changed due to the fading of classic cleavages and the emergence of new ones since the 1970s. Despite the decreasing importance of the classic cleavages their spatial characteristics are still detectable at a regional level while the new ones mainly manifest themselves as urban-rural dichotomies. The party system created in the Eastern part of Europe after the change of regime was similar to the classic Western European one, but it has not followed the western-type path of development in the last 25 years, thus the new cleavages are rather weak.

The proposed paper seeks to identify the social groups that are the major supporters of the new parties in Western Europe and to investigate whether the party preferences of these social groups are similar in the post-socialist countries. The other aim of the paper is to find out if some issues connected to the new cleavages are of different importance in urban and rural settlements. The underlying hypothesis is that the opinions about migration, multicultural society, democratic institutions, and forms of social participation differ between the cities and rural settlements and have a significant impact on voting behavior. The empirical analysis of the role of both socio-demographic and issue-factors will be based on the results of six subsequent rounds of the European Social Survey.

URBAN-RURAL CLEAVAGE – AN EMERGING CLEAVAGE IN SLOVENIAN POLITICS?

Author: *Jernej Tiran**, Slovenia

In recent years, Slovenia has been facing a new level of political cleavage, which is, in contrast to the previous, ideological cleft between the "left" and the "right", expressly spatial in its nature, because it delineates the differences between the urban and the rural areas. The existence of this conflict has actually become perceivable in the political arena lately, as it appears to be fuelled in numerous ways by politicians, but it can also be deciphered from the election results. An analysis of the parliamentary election results at the smallest spatial level for the past 20 years indicates a high correlation with the level of urbanization. The correlation was most expressed in the 2011 elections. The 2014 election saw a decrease in the differences between urban and rural axes, in part as a consequence of some new political parties emerging; however, it remains high and is one of the most distinct factors in the spatial structure of the election results in Slovenia. It is interesting to note that similar clefts have also been arising in recent decades in other countries with much higher urbanization levels. Are these unsolved questions of contrasts between the urban and the rural areas or are politicians using their economic and cultural differences to try to get the voters to identify themselves with certain places? These conclusions reopen the question of the meaning of place as an important factor of electoral behaviour.

THE TALE OF THE THREE CITIES – ELECTIONS IN THE POST-SOVIET CAPITAL CITIES

Author: *David Sichinava**, Tbilisi State University, Georgia

Keywords: electoral geography, Kyiv, Moscow, Tbilisi, urban politics,

Abstract: Elections in the Post-Soviet space (perhaps, not those of the Baltic states), have been often accused of being fraudulent and significantly manipulated by the authorities. The largest cities, especially capitals have been main battlefields for the electoral protests, in some cases leading to the peaceful revolutions (e.g. in Georgia and Ukraine) or suppressed by the government (e.g. Russian protests of 2011-2013). On the other hand, capital cities are the main strongholds of the oppositional and pro-democracy political movements, which despite widespread electoral manipulations, significantly influence the electoral landscapes of these cities.

This paper aims at investigating spatial patterns of elections in the three capital cities of Post-Soviet Eurasia - Moscow, Kyiv and Tbilisi. Using georeferenced polling-station level outcomes of presidential, legislative and municipal elections between 2008 and 2014, I will present the results of Exploratory Spatial Data Analysis (ESDA). It is argued that the election results bear distinct spatial characteristics. The disparities arise between central “prestigious” areas and peripheral former working-class neighborhoods.

Despite the fact that the aforementioned urban areas underwent important shift since the dissolution of the Soviet Union, their distinct social fabric was formed in the height of the planned economy. I suggest that current electoral geographies of the three cities are still affected by the legacies of the Soviet urban development as the latter represents an important contextual effect influencing electoral landscapes of these areas.

SLOT2

Chairs: *Martin Šimon*, *Balázs Szabó*

Schedule: Wednesday, 2 September, 15:00–16:45

CHANGING ELECTORAL SYSTEM AND VOTING PATTERNS: THE GEOGRAPHY OF THE 2010 AND 2014 HUNGARIAN PARLIAMENTARY ELECTIONS

Author: *György Vida**, University of Szeged, Department of Economic and Social Geography, Hungary

Keywords: electoral behaviour, Hungary, political ideology, spatial analysis

Abstract: In Hungary the deepening economic crisis and political instability has brought about significant changes in the voting pattern after 2008. In this respect the 2010 Hungarian parliamentary election was an important event in the political history of the country showing twists and turns. The ruling Hungarian Socialist Party was defeated, two previously dominant parties (Hungarian Democratic Forum, Alliance of Free Democrats) dropped out of the parliament, and two new party (the green Politics Can Be Different and the radical Movement for a Better Hungary) gained parliamentary representation. After the landslide victory of Orban's conservative party (FIDESZ) in 2010, with two-thirds majority in the Hungarian Parliament the necessary electoral reform could be carried out. The new law was finally accepted by the house in November 2011. The mixed nature of the electoral system was kept, however, the total number of MPs was nearly halved, and the boundaries of the single member electoral districts were redrawn substantially. The new electoral system was tested in the parliamentary elections in April 2014. This presentation provides an overview about the changes of the Hungarian voting pattern based on the results of the 2010 and 2014 parliamentary elections. The investigation focuses on constituency and settlement level and the main geographical characteristics of each Hungarian parliamentary party are highlighted.

RADICAL RIGHT IN CZECH PARTY SYSTEM: RISE AND FALL ALL ROUND

Authors: *Martin Šimon**, Local and Regional Studies, Institute of Sociology, Academy of Sciences of the Czech Republic, Czech Republic; *Tomáš Kostecký*; *Renata Mikešová*

Keywords: Czech Republic, electoral geography

Abstract: The article is focused on radical or extremist right parties in Czechia in last 25 years. In general, radical right parties has been relatively unsuccessful in Czechia in comparison with Hungary or Poland. During the transition period we observed “see-saw” like development - radical right parties were relatively successful in first half on 1990's, then almost disappear from political spectrum at the end of the century and emerged again but in different forms in last a few years. The article provides a brief overview of changes in radical right parties' territorial electoral support and attempts to contextualize these changes by using a mixture of datasets related to radical right party focus. The outputs of such contextualisation will be presented and put into comparative perspective.

SPATIAL PATTERNS IN VOJVODINA ETHNOPOLITICS

Authors: *Andor Véghe**, University of Pécs, Hungary; *Áron Léphardt*, University of Pécs, Doctoral School of Earth Sciences, Hungary

Keywords: ethnic mobilization, ethnopoltics, Hungarian and Croatian community in Serbia, Vojvodina,

Abstract: The research aims to discuss the changes within the Vojvodina Hungarian and Croatian communities by analyzing voting patterns and electoral performance since the first multi-party elections. The Hungarian political scene in northern province of Serbia showed a high degree of fragmentation after the initial successes in the early 1990's. Multiple splits occurred and the number of parties competing for Hungarian votes rose from one to seven until 2000. This resulted in the loss of overall support and realignment of the electoral base in a geographical sense. The overthrow of Milosevic gave a new momentum to the biggest Hungarian party, the Subotica-based Alliance of Vojvodina Hungarians (SVM/VMSz). Also, party dominance in the Hungarian

National Council from its establishment resulted in high concentration of control over cultural (minority) institutions, which led to territorial reorganization as well. The main question is how can a party with low ethnic mobilization dominate the ethnopolitical-institutional scene, and why are the minor parties unsuccessful? Or in other words, is there a relationship between ethnic composition/geographical position and electoral success? The electoral dynamism behind the controversial Croatian (Sokac-Bunjevci) ethnic politics is also revealed. Croatian voters were mobilized with low efficiency on many occasions since the 1990's by parties claiming to represent them achieving only moderate successes with different techniques. Although the process of fragmentation within these ethnopolitical communities had mainly ideological-political reasons, it is possible that these are in fact preexisting spatial-social cleavages (north-south, bloc-diaspora, urban-rural) that appear on many levels.

DETERMINANTS OF SUPPORT FOR POLITICAL PARTIES AND ALTERNATIVE MOVEMENTS IN 2014 SELF-GOVERNMENT ELECTION IN WARSAW

Authors: *Marcin Waszak**, University of Warsaw, Poland; *Michał Szczegielniak*, University of Warsaw, Poland

Keywords: electoral behaviour, electoral geography

Abstract: The main goal of the work is to present the spatial analysis of last municipal election in Warsaw. First the authors describe administrative system of Warsaw capital city including law regulations of election procedure. Then, results of council of the city as well as councils of districts elections will be discussed. For a better understanding what is characteristic for Warsaw election cultural, economic and historical background of the analysis will be provided with explanation of diffusion of votes across particular Warsaw districts. Additionally authors will complete their conclusions with "iron" constituencies characterization supporting different candidates. Moreover, new actors on Warsaw political scene will be identified and described. Especially, their contribution to political discourse will be stressed. Following the new local civic movements phenomenon, relevant social and cultural factors for their results will be also discussed. Furthermore, implications of the election in the Polish capital for local and national politics will be presented.

For the purposes of the research, Warsaw voting and turnout will be compared with results reached by main political forces at the national level. Finally, authors are going to present forecast for 2015 parliamentary elections in Poland with reference to support-related trend lines identified on experience of the last Warsaw authorities election as well as public opinion surveys grounds.

P34 NEW ECONOMIC SPACES IN RURAL AREAS

Organizers: *Konrad Czapiewski*, *Vladan Hruška*

Location: Room C

SLOT1

Chair: *Konrad Czapiewski*

Schedule: Tuesday, 1 September, 08:30–10:15

NON-AGRICULTURAL AND NON-TOURISM ECONOMIC INDUSTRIES IN RURAL PERIPHERIES OF THE VISEGRAD COUNTRIES

Author: *Konrad Czapiewski**, Institute of Geography and Spatial Organization PAS, Poland

Keywords: entrepreneurship, rural areas, v4 countries

Abstract: The presentation is strictly connected with the V4 project "Non-agricultural and non-tourism economic industries in rural peripheries of the Visegrad countries".

The project has three goals:

- to map non-agricultural and non-tourism enterprises in peripheral rural areas of the selected region;
- to examine opinions of entrepreneurs on running business in peripheral rural areas;
- to research attitudes of representatives of peripheral rural municipalities to the entrepreneurship.

During the presentation the main findings of the project will be presented and as well the final publication will be distributed.

SUSTAINABLE RURAL AREAS: WITH OR WITHOUT PEOPLE?

Author: *Vladan Hruška**, Jan Evangelista Purkyně University in Ústí nad Labem, Czech Republic

Keywords: economy, rural areas, rural development

Abstract: One of the goals of the present European rural development policy is or should be to reverse the negative depopulation trend in peripheral rural areas by, inter alia, promotion of creation of new jobs there. This paper asks the questions, whether present constellation of rural development tools and measures derived from the Common Agricultural Policy (CAP) is really capable to bring development to rural areas. Further, it critically analyses the focus of such policies, as they mostly concentrate on agriculture, tourism and traditional handicrafts. However, other economic industries which are not supported by the prevailing productivist thinking in political discourse or do not fit to our idyllic representation of rural space (e.g. manufacturing) are neglected in rural geographical research. Author therefore calls for more job-generating policies which must much more reflect present economic structure of rural areas of developed countries.

THE RELIANCE OF DIFFERENT TYPES OF RURAL REGIONS ON INTERNAL AND EXTERNAL INTERRELATIONS

Authors: *Thomas Dax**, Federal Institute for Less-Favoured and Mountainous Areas (BABF), Austria; *Andrew Copus*

Keywords: EU Cohesion Policy, local governance, rural development, ruralspace, territorial observation

Abstract: The concept of rural development has shifted gradually over the last three decades from a view which assumes that “rural” can be primarily understood by “agricultural” or land use activities. As for regional development the influence of other sectors, social changes and aspects of inequalities have to be taken into account to capture the potential of rural regions. More recently the relevance of the “relational turn” for rural regions (of all different types) has been acknowledged more widely in European research on rural and regional changes.

According to these findings local development is a process of enhancing the relational positioning of local actors in economic, social and cultural interactions, both within and across (territorial) boundaries. The paper will present evidence from a European research (ESPON-project EDORA) which will be supported by more general data of divers types of regions within OECD countries (based on the dataset of OECD Territorial Indicators) that networking and trans-local linkages are of increasing importance for regional growth and sustainable development. Rural spatial processes will be analysed with regard to rural differentiation and in reflection of “connexity” and proximity. In this concept, the development approach will have to be related more strongly to a range of local assets, particularly emphasizing the enhancement of hard and “soft” infrastructure and skills. The findings will focus on the need for a renewed concept of “Rural Cohesion Policy” that takes account of changes and drivers of rural development.

HOW FIRMS ADAPT TO DEMOGRAPHIC DECLINE IN RURAL-PERIPHERAL REGIONS – EMPIRICAL EVIDENCE FROM EAST AND WEST GERMANY

Author: *Birgit Leick**, University of Bayreuth, Economic Geography, Germany

Demographic decline affects many rural and peripheral regions across Germany and poses major challenges to firms and industries located in such areas. Firms will face changing local markets (labour markets and markets for locally consumed goods) due to the decline and ageing of the population or outmigration. Hence demographic decline will significantly influence market environments for firms and industries, notably in rural-peripheral areas. Against this background the question will be how firms embedded in declining regional settings can stay competitive and build adaptive strategies to cope with these changes?

In the paper presented, I identify and describe adaptive strategies that firms apply for changing markets in demographically declining regions. My aim is to explore the following research questions: 1) How and to what extent does demographic decline at the local level exert pressure on firms to adapt?, 2) What risks and opportunities do these pressures generate and how do they translate into competitive strategies? The study takes an exploratory approach and uses introductory narrative interviews and a quantitative survey from several regions in East and West Germany. The paper aims to gain first insights into this under-developed topic and add to theory-building at the interface of economic geography and business studies.

“MOUNTAINS WORKSHOPS”: RESILIENCE ELEMENTS OF AN ENDOGENOUS MODEL OF SUSTAINABLE DEVELOPMENT.

Author: *Mauricette Fournier**, Université Blaise Pascal, France

Keywords: industrial enterprise, innovation, local development, mountains, resilience, SMEs,

Abstract: In the field of representations, the mountain looks more like the great outdoors than containment of the workshop. Yet the European mountains are far from devoid of industrial enterprises, often organised into “districts” according to the wording of the economist Alfred Marshall. They offer reflection situations entirely original, even paradoxical: despite the accumulation of visible disabilities given the classic criteria of business location (isolation, distance from markets...) the secondary sector showed a remarkable resistance. To stay in a context of increasingly competitive, these territories have manifested the constant capacity for adaptation and innovation. In based on several local examples (in France, Germany, Portugal, Italy...), we would like to highlight the main ingredients of this resilience. “Mountains - workshops” are often the result of multi-secular process of industrial activity sedimentation which in one region to another, have much in common by the genesis, the diversification process, the importance of learning. The vitality of these production systems are also based on a long dialectic of reports city / countryside and an ability to bring out entrepreneurial reflexes to create new SMEs. In the contemporary period, this model of economic resilience teaches that an endogenous local development must feed external inputs and that political and institutional players have a key supporting role that goes far beyond the mere provision of material aid.

SLOT2

Chair: *Vladan Hruška*

Schedule: Tuesday, 1 September, 10:45–12:30

POST-SOCIALIST ECONOMIC RESTRUCTURING OF RURAL CZECHIA: TIME-SPACE DEVELOPMENT OF NUMBER OF JOBS

Authors: *Vladan Hruška**, Jan Evangelista Purkyně University in Ústí nad Labem, Czech Republic; *Pavel Doležal*

Keywords: economy, postsocialist transition, ruralspace

Abstract: The presentation focuses on the post-socialist economic restructuring of rural areas of Czechia. Retreat of primary economic sector - mining, forestry and agriculture – negatively influenced the number of jobs in rural areas. However, some rural

localities experienced also growth of number of jobs in other economic activities – manufacturing and services. The goal of this paper is to analyse number of jobs in Czech rural areas and especially their uneven development in time and space. Main factors traditionally considered as crucial for rural economic development will be correlated with the number of jobs based on the data from Census 1991, 2001 and 2011.

LEVEL OF EDUCATION VS ENTREPRENEURSHIP IN RURAL AREAS IN POLAND

Authors: *Iwona Kopacz-Wyrwał**, Jan Kochanowski University in Kielce, Poland; *Wioletta Kamińska*

Keywords: educational attainment of population, level of economic development, rural areas, typology of gminy

Abstract: Immaterial factors, such as education of a population, gain in importance in processes of economic development at the turn of 20th and 21st century. One can even observe that economic success, both of regions and enterprises is strongly related to level of knowledge, skills and professional experience of citizens.

The aim of this article is to analyse relations between educational attainment of population and level of entrepreneurship in rural areas in Poland. What is more, an attempt has been made to create a typology of communities by the analysed relations. In this article, entrepreneurship is understood as a human's personality characteristic, which is expressed in his creative action including creating and developing private business activity, taken up at one's own risk. Entrepreneurship indicator has been used in this paper in order to measure the level of entrepreneurship in rural areas in Poland. This is one of the basic indexes defining the entrepreneurship in a given area, illustrating number of business entities of a given territorial unit per 1000 people of working age.

The research process included three stages. Firstly, spatial diversification of educational attainment of rural population has been determined; secondly, level of entrepreneurship of each territorial unit has been estimated; thirdly, the relation between educational attainment of population and level of entrepreneurship has been analysed. Two of these stages has been finished by classification of communities by the analysed feature. Third stage has been finished by typology of communities.

OVERESTIMATING A ROLE OF TOURISM IN PERIPHERAL RURAL AREAS ON THE EXAMPLE OF SELECTED REGIONS IN POLAND AND CROATIA

Author: *Denis Cerić**, Institute of Geography and Spatial Organization – Polish Academy of Sciences, Poland

Keywords: financial programmes, Kontinentalna Hrvatska, Mazowieckie, strategies, tourism function

Abstract: Rural tourism is often found as a solution for all problems or difficulties for the structural problems of peripheral rural areas. The potential socio-economic role of tourism in those areas is often overestimated both by citizens and public authorities. Therefore, numerous local strategies of the peripheral rural areas have included development of tourism as one of their main goals and various financial programmes were prepared and conducted in order to support development of rural tourism during the last two decades. Despite of some positive changes, the results are in general not satisfying.

Based on scientific literature and statistical data, the paper is critically examining the role of tourism in rural areas on the example of all rural municipalities of two European NUTS-2 regions: one in Poland – Mazowieckie, and another one in Croatia – Kontinentalna Hrvatska. The dynamics of stronger development of rural tourism in both countries can be attributed to 2000s, when numerous activities from the local and national governments were employed to support development of rural tourism. The role of tourism is researched through the change of tourism function, which is calculated for every single municipality of the researched area in 2004 and 2013, by using for this purpose developed synthetic measure. The results are brought into correlation with public activities employed to support development of rural tourism on researched area and they are commented.

The purpose of this paper is to provoke scientific discussion on artificial developing of tourism in rural areas which are not pre-determined for tourism.

DESCRIPTION OF SUPPLY MANAGEMENT IN CENTRAL DISTRICT OF NAJAF ABAD CITY

Authors: *Fatemeh Yadali Jamaluei**, Iran; *Jahanbakhsh Saffari*, Iran

Keywords: earthquake, geography, housing, rural areas, rural development plan, rural development policy, settlements, territorial management

Abstract: The purpose of this paper is the investigation of renovation, improvement and strengthening of rural housing in five villages in the Central District of the city of NajafAbad. Najaf Abad city is located at the western part of Isfahan province. Five rural points including Filvar, Rahmatabad, Hajiabad, Jalalabad and Nehzatabad were selected with a combined population of 8,779 people in the 2006 census. In this work the most important activities carried out in housing management in the areas of -renovation- improvement and "retrofit" in Iran, and in the selected area for this case study have been analyzed in details. An assumption in relation to description of supply management in Central district of Najaf Abad city is that policies pertinent to renovation, improvement and retrofit have not been effective in reaching their predefined goals, due to neglecting the socio-economic characteristics of the area under consideration. In this study literature material, library, documents- library, field methods: including interviews, observation and questionnaire survey have been used. Rural housing supply management pertinent to property reconstruction in the studied rural areas of the Central District of NajafAbad has met its predefined quantitative targets to some degree; however in regards to housing supply quality the required attention has not been devoted and planning have been neglected. Also the improvement of rural housing, according to its definitions, standards, and characteristics have not been achieved acceptable results, either quantitatively or qualitatively. Finally, this study reveals that no planning has been done in the area of strengthening the rural housing.

THE ROLE OF CULTURAL PRODUCTS IN RURAL YOUTH MIGRATION (CASE STUDY: EAST OF GUILAN PROVINCE, IRAN)

Author: *Nader Amiri**, Razi University, Iran

Economical preferences and access to the higher levels of different services are mentioned as two main reasons and motivations of rural-urban migrations. However, the role of cultural products in motivating peoples to migrate from rural areas has largely been neglected in most geographical and socio-economic studies in Iran. Selected area for the present study is the most eastern part of Guilan province in north of Iran, which contains 1235 villages with a population of 343665. The applied method in the present study is a descriptive-analytical method. The current socio-cultural characteristics of the area are described, and then relations between these characteristics and movements of rural population are examined. For the field study, 4000 questionnaire were distributed and completed among the youth (individuals 15 to 24 years old). Results of the present study show that the correlation between availability of electricity and access to cultural products is stronger than availability of asphalt roads and access to cultural products. Finally, the correlation between access to cultural products as an independent variable and “tendency to migration” as a dependent variable was 0.707 with 97.5% of significance. Thus, the more access to cultural products, the more tendencies to migration of rural youth to urban areas.

P35 NO MAN’S LAND OR DEPENDENT PERIPHERIES: UNDERSTANDING ECONOMIC RESTRUCTURING THROUGH LOCAL PRACTICES WITHIN AND OUTSIDE GLOBAL PRODUCTION NETWORKS

Organizers: *Ernő Molnár, Erika Nagy, Daniel Schiller*

Location: Room K

SLOT1

Chairs: *Ernő Molnár, Erika Nagy* Discussant: *Daniel Schiller*

Schedule: Tuesday, 1 September, 17:15–19:00

A WORLD-WIDE COMPARISON OF THE GEOGRAPHICAL CONSEQUENCES OF THE 1929 AND PRESENT CRISES

Author: *Christian Vandermotten**, Université Libre de Bruxelles, Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, Belgium

Keywords: economic crisis, geopolitic, inequalities, international trade

Abstract: The paper will examine the nature of both crises (and of the previous strong economic growth periods), including considerations about the regulation systems. It examines the consequences of both crises on the evolution of the inequalities, on the international trade, on the relocation of the production, the balance between industrial and financial capital, geopolitical issues, not forgetting internal political evolutions, etc. It concludes that the present crisis is more systemic (including the sustainability aspects) and more fundamental than the previous one, which was more clearly included in the Kondratieff’s cycles logics.

BOTTOM-UP ACTIVITIES OF LOCAL COMMUNITIES IN FOOD PRODUCTION IN URBAN AREAS

Authors: *Jana Szuhova**, Slovak University of Technology, Slovakia; *Dagmar Petrikova*

Keywords: agriculture, community, local food, public space, urban renewal

Abstract: Various bottom-up movements and participatory tools for engaging local people into the neighborhood community life might help to improve diversity and strengthen social responsibility of communities and individuals. This paper aims to discuss the potential of using social capital of local communities, which is inherently connected to the space and its quality, to foster local sustainability.

Social capital may be expressed also by the presence and activity of different groups and individuals, including those called “urban gardeners”. Urban gardeners (or farmers) are focused on local production of food, largely for local consumption. This contribution is based on the knowledge on guerilla urbanism, community gardening, food production concepts in the urban areas and recent research of Andres Duany on agrarian urbanism. Such communities might become an important part of the shift from urban gardening towards agrarian urbanism. As he argues, cities generally spend certain amount of their budget on the landscaping and maintenance of greenery, which, however, could be partially allocated in favor of the food production and support of residents’ involvement within this process. According to Duany, agrarian urbanism opens up whole new perspectives on the role of community and considers the potential to shift leisure time activities into the commitment to the local sustainability. However, this study also attempts to extend prior research on agrarian urbanism by examining possible innovative ways of using vacant and underused spaces, such as brownfields, for the implementation of the “agrarian urbanism concept” into the planning practice.

LOCAL STRATEGIES FACING GLOBAL ECONOMIC RESTRUCTURING: THE CASE OF A CATALAN OLD INDUSTRIAL CITY

Author: *Eduard Montesinos i Ciuró**, Societat Catalana de Geografia and Human Geography Department, Universitat de Barcelona, Spain

Keywords: Catalonia, local strategies, Manresa, NIDL, old industrial city,

Abstract: Focusing on the new international division of labour in a European context and in a local scale, there can be detected some losing localities inside winning regions. Catalonia has a metropolis well connected to global economic chains and an urban system outside this metropolis that deal with growing uncertainties and difficulties. In this paper, a Catalan middle-sized city outside the Barcelona metropolitan area with a long industrial tradition, Manresa, is taken as a study case to exemplify the strategies that arise within these losing localities to face the shifts of the global economy. Beginning with a historical and statistical contextualization, the main contribution of this work is a qualitative approach that study, from semi-structured interviews, the discourses of the principal local agents that have the mission to plan and implement strategies of development. The results of the interviews show there are important incompatibilities in these discourses. It is interpreted that this is one of the reasons why do not exist powerful strategies that take the city as a whole. Another important result is that hitherto the only strategies implemented are of top-down character, trying to attract global economic activity to the locality. There was an emblematic project receiving EU funding that failed emphatically. From this failure it is concluded that Manresa needs bottom-up projects, where citizenship can take control of the processes and decide the model of city they prefer. A successful example is analysed to demonstrate that if popular cohesion exist, it is the most suitable way to proceed.

BETWEEN TWO FIRES: CHANGING ROLE OF EAST CENTRAL EUROPE IN THE GLOBAL PRODUCTION NETWORKS OF LABOUR INTENSIVE INDUSTRIES. A CASE STUDY OF THE HUNGARIAN FOOTWEAR SECTOR

Author: *Ernő Molnár**, University of Debrecen, Hungary

Keywords: global production networks, upgrading

Abstract: During the economic transformation, the Hungarian footwear industry experienced the collapse of its traditional markets: there was a huge decline in the production and employment of the sector. The majority of the firms – as an escape route – chose the way (based on existing traditions from the socialist era), to make toll-manufacturing for their Western customers seeking cheaper production possibilities in a more and more globalized labour-intensive industry. The FDI investments of the 1990s resulted a dual structure in the sector (1) with Hungarian firms making mostly toll-manufacturing for Western partners in Hungary and abroad, as well as (2) with subsidiaries owned by foreign enterprises. Both of them had export-oriented characteristics: so a strong dependency on global production networks, dominated by Western firms, evolved. The situation became problematic, as the leading enterprises of these production networks moved the mass production further to the cheaper locations of Eastern Europe and Asia. The falling purchases of the Western customers as well as the closure of more subsidiaries led to a second decline of the sector.

The presentation, based on in-depth interviews of leading footwear companies in Eastern Hungary, focuses on the firms' upgrading strategies concerned product structure, functions and production (as responses to the global challenge), as well as on the institutional background of these adaptation processes. The question is: which perspectives has the sector got in our region, between West and East?

P36 OCCUPY! – POWER, RESISTANCE AND COMMEMORATION IN PUBLIC SPACE

Organizers: *Maoz Azaryahu, Ágnes Erőss*

Location: Room F

SLOT1

Chair: *Kenneth Foote*

Schedule: Tuesday, 1 September, 10:45–12:30

TRAVELING HERO: GLOBALIZED TOPONYMIES OF NELSON MANDELA AND MARTIN LUTHER KING JR.

Author: *Eri Kitada**, University of Tokyo, Japan

Keywords: commemoration, human rights, minority issues, place names

Abstract: This presentation sheds light on the growing commemorations for minorities from a globalized angle. 20th century has witnessed critical democratic changes; several countries abolished discriminative laws against racial minorities; individual leaders of “once” marginalized groups have become celebrated in monuments and place names, which have long focused on individuals of dominant groups. On one hand, the new commemorations have symbolizes a social change and the uplift of minority within nation-states. Geographical scholarship on toponymy has discussed the domestic place naming for social justice and pointed out the remaining segregation behind social changes. On the other hand, such new heroes are honored beyond borders, but few researches have examined this expanding toponymy. This study focuses on transnational place naming after Nelson Mandela, South Africa's first black president, and Martin Luther King Jr., an African American leader in US social movements. The legacy of these two heroes shapes public space off South Africa and the US today.

How has the world remembered Mandela and King? Their deeds have significantly influenced the concept of human rights, democracy, and resistance. The dissemination of their names implies that oppressed people in other regions identify these individuals as “their” heroes; or the authority may use the reputations of these human rights activists from a diplomatic interest. I hope to argue that the globalization of minority commemorations illuminates collective memory surrounding democracy and on history from the below, and that this phenomenon leads also to the oblivion of different stories in the social movements.

NELSON MANDELA : GLOBAL OR POST-COLONIAL ICÔNE ? EVIDENCE FROM THE TOPONYMY

Author: *Frédéric GIRAUT**, University of Geneva, Geography Department, Switzerland

Keywords: big data, globalization, place names, post-colonial, public space

Abstract: According to the spatial distribution in time and space of the places named after Nelson Mandela (extended to Madiba), we argue that Nelson Mandela references - as they appears in public space through toponyms - are far from being fully globalized, but are strongly correlated to the areas of the African colonial and post colonial issue.

The paper includes mapping evidences based on a worldwide geo-time database we have build. It references more than 1000 toponyms dedicated to public places and infrastructures, including some private or non governmental initiatives in naming neighborhoods, housing or residential complexes, resorts or hotels; but excluding numerous individual initiatives in naming houses, shops and companies. In addition to the geoDatabase, a wide array of controversial place naming initiatives is documented and allows an in depth analysis of the arguments from different types of actors involved in debates or disputes on the issue of Naming after Mandela.

The mapping approach and complementary analyse of contextualized debates contribute to a multiscalar geopolitics of the Mandela place naming, from the world level to the intrametropolitan area level.

CONTESTED PLACES, CONTESTED PASTS: PUBLIC MEMORY AND COMMEMORATION IN CONTEMPORARY HUNGARY

Authors: *Kenneth Foote**, University of Connecticut, United States; *Anett Árvay*, University of Szeged, Hungarian Studies Study Center, Hungary

Keywords: commemoration, cultural environment, public space

Abstract: We focus on recent debate over contested sites of memory in Hungary and the way that place and politics intersect in defining contemporary commemorative practice. Some sites, such as Budapest's Terror Háza, Parcel 301, and the German Occupation memorial have attracted national and international attention, but memorials in smaller cities, towns and villages are equally important in debates over how to view the national past and the meaning of key events such as the First and Second World Wars; the interwar period; the Holocaust; the 1956 uprising; and the legacies of the communist period. In this project our aim is take a broader look at these sites--to move beyond the most accessible sites to consider how public memory has been contested in both time and space at a great variety of sites across Hungary. Hungary has a very different political, social and economic history than even its closest European neighbors and offers an unparalleled opportunity to study the emergence of commemorative traditions as they are shaped and changed by regimes of contrasting ideologies.

“IN MEMORY OF VICTIMS”: MONUMENT AND ANTI-MONUMENT IN FREEDOM SQUARE, BUDAPEST

Authors: *Maoz Azaryahu**, University of Haifa, Israel; *Ágnes Eröss**, Geographical Institute RCAES HAS, Hungary

Keywords: Budapest, commemoration, protest, public space, victimhood

Abstract: Conceived by the Hungarian government as a commemoration of the German occupation of Hungary and according to the inscription dedicated to the “memory of victims”, the monument in Freedom Square has been a scene of protest against a prominent emblem of the right-wing Hungarian government. The protest has taken the form of an ostensibly spontaneous “anti-monument” that contests the official meanings of the government-sponsored composition and especially the notion it conveys depicting Hungary as a victim of German occupation. Whereas the official monument evokes traditional forms and its aesthetic is neo-classical, the “anti-monument” consists of ephemeral features such as gradually accumulated written messages and everyday artifacts, and it is constantly built up by mostly anonymous protesters. The anti-monument not only challenges the adjacent official monument and its notion of Hungary as a victim of German occupation; importantly, it defies the legitimacy of the official conception of victimhood by direct references to the suffering of Hungarian Jews at the period.

This lecture explores the geopolitics of commemoration at the contested memorial site with an emphasis on the dialectic relationship between the official monument and an adjacent, ostensibly spontaneous anti-monument. Focusing on a contemporary case-study at the center of the Hungarian capital, this lecture offers insights into resistance and protest as geospatial features of the politics of public memory.

CLAIMING JOHANNESBURG: ACTS OF SYMBOLIC APPROPRIATION AND DIVISION

Author: *Guy Jano Trangos**, Gauteng City-Region Observatory, South Africa

Keywords: appropriation, public space, transformation

Abstract: A city of social, economic and spatial fragmentation and separation, post-apartheid Johannesburg continues to grapple with parallel histories, broken identities and isolated communities. The city was founded on socially and economically destructive and extractive mining capital supported by colonial networks. Social narratives and readings are thus often grounded in notions of the oppressed and the oppressor, are complex and their claims divergent. The result of this is a public realm where symbols of colonial capital and apartheid oppression define historical urban form and these symbolic landscapes are interpreted through opposing lenses.

This paper explores three contemporary acts of appropriation in Johannesburg's inner city, as different actors seek to claim or embed their own spatial interpretations or visions. In many ways these acts resist other readings, uses and social claims on urban spaces and artefacts. The first act is the controversial painting pink of historical and neglected city buildings. The second is the urban graffiti used to define a site of inner city reinvestment, and the third investigates a public funded inner-city art project that attempts to create an investor friendly urban environment.

While Johannesburg harbours a number of idiosyncratic forces and contests, these have bearing on European cities as sites of increased public contest and friction where rising privatisation and conservative values assert specific claims and readings of urban space. Understanding these political processes, the divergent interests of actors and the social consequence of these processes underscores the importance of collective processes in democratic nation building.

"INVISIBLE" IN PUBLIC SPACE: THE BLACK BLOC PHENOMENON IN BELGIUM AND BRAZIL

Author: *Lucas De Melo Melgaço**, Vrije Universiteit Brussel, Belgium

Keywords: black blocs, protest, public space, Rio de Janeiro, surveillance

Abstract: Behind the decision of organizing a public demonstration is the aim of making a claim public, thus, visible. Normally the bigger and louder the demonstration and the more covered by media, the more successful it is considered to be. However, a specific group of protesters, often labelled Black Blocs, wants to subvert this logic by trying to remain anonymous in the public space. Wearing face-concealing items they essay to both protest and avoid the identifying gaze of public authorities. The police, however, have invested in surveillance technologies, which makes the public space increasingly monitored. In today's digital age it is much more difficult to remain unidentified than it was in the past. By comparing Belgian and Brazilian cases, the paper will address the balance of power between the police and the black blocs in relation to practices of visibility, "invisibility", and surveillance in public spaces.

URBAN DIVERSITY AND THE PRODUCTION OF PUBLIC SPACE IN BUDAPEST

Authors: *Lajos Boros**, University of Szeged, Hungary; *Szabolcs Fabula*, Department of Economic and Social Geography, University of Szeged, Hungary; *Dániel Horváth*; *Zoltan Kovacs*, University of Szeged and HAS, Hungary

Keywords: Budapest, diversity, public space, urban geography

Abstract: Public spaces are spaces for representation of different individuals, social groups, ideologies, values, cultures (Mitchell 2003). At the same time, public spaces are commodified and "disneyfied" in capitalism (Zukin 1991) thus the creation of a homogenous, "desirable" spatial form and use of public space is often intended. As an ideal type, public space is usually imagined as a utopia of spatial form (Harvey 2000). Therefore, their production is characterised by constant rivalries and struggles and causes social conflicts. As a result of the conflicting interests and purposes, these spaces are heterogeneous and homogeneous at the same time. In addition, post-socialist production of spaces has their particular development paths which are often characterised by contradicting traditions and objectives regarding the spatial form and the every day practices taking place there. These contradictions create conflicts between various individuals, social groups, actors of urban policies etc. The aim of the paper is to introduce how urban social diversity is (re)presented in public spaces in the 8th District of Budapest. Which groups and ideologies are more visible than the others? What kinds of interests, ideologies and power relations influence the struggles for public space? The research is based on the content analysis of policy documents and interviews conducted with the residents of one of the most diverse districts of Budapest.

SCHIZOPHONIC AND TUNING – AN INTERDISCIPLINARY STUDY OF SOUND AS AN IDENTITY IN THE CONTEMPORARY URBAN SPACE

Author: *Carlos Gerardo Mena**, Universidad Politecnica de Madrid, Spain

Keywords: cultural, cultural heritage, ethnic conflict, identity, landscapes, public perception, reverberation, right to the city, schizophrenic, sounds, soundscape, tuning

Abstract: This research aims to be part of a system; it is part of parallel investigations in the framework of the landscape Lab of the Technical University of Madrid, its developed in the contemporary and complex scenario, the border between Eastern-Western. The study explores the soundscape; focused on discovering how the call to prayer Al-Adhan works in Europe. The attempt was to move the restlessness of the sound of minarets in East civilizations and reveal its role in the integration of Muslim immigrants in

western Europe. Do they have the right conditions to conserve and develop their manners? As for the acceptance of mosques and minarets in Western societies, for years have remained strong debates in Europe: first, there is a trend that opposes to the visibility of Islam, understanding it as a threat and as a symbol of lack of integration into the host society; Secondly, there are groups who believe that this new visibility of Islam is a sign of integration, showing the interest of the Muslim population to practice their religion and live their faith beyond the theological debates. Perhaps this second consideration is the one that we have to bring to the table, from a moderate perspective, promoting the multiplicity through a broader education in the knowledge of cultures customs and beliefs. The soundscape as a phenomenon to induce behaviors and refine diversities within the identity of each particular culture, is a right that we should not lose and that every city needs.

THE APPROPRIATION OF PUBLIC SPACE IN DOWNTOWN CLUJ-NAPOCA/KOLOZSVÁR – MEASURES AGAINST A NATIONAL MINORITY OR THE CONSTRUCTION OF A VINDICATORY NATIONAL COLLECTIVE MEMORY?

Author: *Aron Szentpáli**, Eötvös Loránd University – Department of Social and Economic Geography, Hungary

Keywords: commemoration, ethnic conflict, public space, state power, street names, Transylvania, urban structural changes

Abstract: Cluj-Napoca has always played an important part in the cultural life of Transylvania, and has borne symbolic significance for the ethnic groups living there. Over the centuries, the different national interests left an impressive print on the urban pattern of the city. The city's history shows that every ethnic group, once in power, tried to prove its rights not only by keeping ethnic composition under control but also by transforming the image of public space. Both the heterogeneous and the tendentially homogeneous cityscape reflect the political interests of the dominant ethnic group.

In this paper an attempt is made to present the changes reflected in the history of a specific place in the city, the former Trencsin (now called Avram Iancu) Square in Cluj-Napoca from the 1880s to the present time. In my paper I also aim to present the endowment of spatial elements (buildings, street names and monuments) with symbolic meanings.

The political shift in Transylvania after World War I brought about a tendentious practice of symbolic expansion of the new regime manifested in removing statues and renaming streets to appropriate public space. The process of urbanization in Romania has also had a significant impact on the ethnic configuration of the city and the symbolic appropriation of public space. The built environment carries an outstanding role in emphasizing the presence of a certain (ethnic) group in a given space. Its visibility and accessibility as well as the symbolic meanings attached to it have direct influence on local thinking.

P37 PEOPLE, PLACE, POLITICS – CHALLENGES FOR CENTRAL EUROPE AND THE BALKANS

Organizers: *Elena dell'Agnese, Norbert Pap*

Location: Room E

SLOT1 CHALLENGES FOR CENTRAL EUROPE

Chair: *Elena dell'Agnese*

Schedule: Monday, 31 August, 15:15–17:00

TERRITORIAL IDENTITY OF THE INHABITANTS OF CENTRAL EUROPE: A COMPARATIVE ANALYSIS OF THE VISEGRAD FOUR COUNTRIES

Author: *Richard Nikischer**, Faculty of Science, Charles University in Prague; Institute of Sociology of the Academy of Sciences of the Czech Republic, Czech Republic

Keywords: eurobarometer, region, territorial consciousness, Visegrad Four

Abstract: The contribution presents an analysis of the territorial identity of the Visegrad Four countries' inhabitants, whereby stress is laid on international comparison of the degree of territorial consciousness. Some attention is also devoted to interregional differences in this degree. This is analysed by means of data from the Eurobarometer 73.3 survey, which took place in 2010. This allows us to set the analysis into a broader European context. In the contribution, the territorial consciousness is analysed on four levels - local, regional, nation-state and European. Although the V4 countries have a lot of cultural-historical similarities, the degree of territorial consciousness of their inhabitants differs at each of these levels. In this regard, however, also many similarities can be found between the Visegrad Four countries, especially between Poland and Hungary, which are considerably homogeneous countries in socio-cultural terms. This is also reflected in the relatively high differences between the degree of regional consciousness and the degree of nation-state consciousness in these countries.

REGIONAL DIFFERENCES AMONG THE STATES OF THE VISEGRAD GROUP

Authors: *Jan Hauke**, Adam Mickiewicz University in Poznań, Poland; *Barbara Konecka-Szydłowska*, Institute of Socio-Economic Geography and Spatial Management Adam Mickiewicz University in Poznań Dzięgielowa 27 61-680 Poznań, Poland, Poland; *Katarzyna Kulczyńska*, Adam Mickiewicz University in Poznań, Poland

Keywords: convergence, regional inequalities, Visegrad Group

Abstract: A contemporary problem of socio-economic development is the deepening of spatial differences visible in a regional approach. The research on regional differences starts with determining the state of the economies of regions and with dividing them

into strong and weak ones. It is assumed that inequalities in the level of development of regions are detrimental to, or even hinder, the socio-economic development of a country. They cause contrasts in the population's level of living, determine the ability of regions to undertake their own measures for development, and limit the possibility of establishing inter-regional cooperation. The tendency to reduce regional inequalities has become one of the chief tasks of regional policies.

This paper offers an analysis of the current state of, and changes over the recent years in, regional inequalities in the countries of the Visegrad Group, which includes Poland, the Czech Republic, Slovakia, and Hungary. The study was made for 37 NUTS 2 units: 16, 8, 4 and 7, respectively, in each country. The time range embraced the years 2003–2013. The following cognitive questions were addressed:

1. How did the level of socio-economic development of the analysed NUTS 2 units change over the study period?
2. Was there a visible tendency for regional differences in socio-economic development to decrease?

The evolution of regional inequalities in the countries of the Visegrad Group was examined using convergence methods.

HOW NEW TRANSPORT INVESTMENTS INFLUENCE MOBILITY? CASES OF VISEGRAD COUNTRIES IN THE LAST DECADE.

Authors: *Jakub Taczanowski**, Jagiellonian University, Institute of Geography and Spatial Management, Poland; *Arkadiusz Kołós*

Keywords: Czech Republic, East and Central Europe, EU policies, Hungary, mobility, Poland, sustainability, transport, V4 countries, Visegrad Four

Abstract: The accession of Poland, the Czech Republic, Slovakia and Hungary to the European Union in 2004 has accelerated investments in transport infrastructure, both in new roads – especially motorways – and railways, many of which are now being modernised. EU funds together with the growing consciousness of negative effects of car use in towns and cities have also played a very important role in modernising urban public transport, in particular in terms of building new tram lines and buying new rolling stock. The goal of the paper is to answer the question, whether and to which extent this investment acceleration has influenced changes in mobility, in particular in modal share. In practice the decision-makers have often given priority rather to road than rail, especially outside urban agglomerations. However, differences between the four Visegrad countries have been significant. According to expectations, the road infrastructure development – which scale has been much more significant than that of rail and public transport in general – has accelerated modal shift from rail to road transport as well as from public to private transport, especially in Poland. This is quite different from the actual expectations of transport planners both at national and European level who tend to emphasise the need for placing limits to individual car use in order to make transport more sustainable and environmentally friendly.

UKRAINE IN THE GEOECONOMIC, GEOPOLITICAL AND GEOCIVILIZATION REGIONS OF EUROPE

Author: *Borys Pavlovich Iatsenko**, National University of Kiev, geographical faculty, Ukraine

Keywords: junction geopolitical region

Abstract: The global political geography studies are operating on the cases of geocivilization, geoeconomic and geopolitical regions. Geoeconomic structure of Europe consist from highly developed “core” and multitude of “semiperipheryes” countries extending from Central Europe to Siberian outskirts of Russia. The main geoeconomic process - introduction of the new member of EU to the “core”. But Ukraine - central europeans country with dig economic potential - are still waiting on the line.

The territory of Central Europe as a junction geopolitical region have always been at the crossroads of interests of powerful forces. But in this regional system are formed the interaction of local national economies, political and cultural life. Ukraine always interested and took part in this European civilization processes.

During the extend of history two geocivilization regions (West and East Christ Christian) were formed in Europa. Dividing line (so called “ Huntington line”) leave eastward Russia and eastern parts of Ukraine, Belarussia and Balkans. In the 21-st century due to the extending eurointegration to the East Balkans countries became memders of EU. Ukraine carries on the heavy struggle for its european choise of nation.

Thus, due the geopolitical processes, the trend to shift “Huntington line” eastward arose.

SLOT2 GEOPOLITICAL CHANGES IN THE BALKANS

Chair: *Norbert Pap*

Schedule: Monday, 31 August, 17:15–19:00

TWO DECADES AFTER DAYTON

Authors: *Péter Reményi**, University of Pécs, Hungary; *Norbert Pap*, University of Pécs, Hungary

Keywords: Bosnia and Herzegovina, DPA, ethno politics, ethnoterritorial structures

Abstract: In 1995 during the peace negotiations in Dayton, Ohio, USA, the parties agreed in a decentralized state, which was the price of the peace based on compromise. Armed hostilities have been stopped and hopes were high, but it turned out that the agreement which ended the war is unsuitable to govern a state. During the two postwar decades many important decisions has been made and many steps had been taken to put Bosnia and Herzegovina to a path of development and prosperity but the Dayton system failed to solve one very core issue of the country: the ethnonational tensions. No Bosnian identity is created in large Bosniak, Serb and Croat identities remained decisive. The ethnoterritorial structures of the agreement empowered the elites of these communities with state-like authorities. Combine the bloody war with interethnic characteristic and the post-war ethnoterritorial systems and the stalemate is built in the system. After a series of internationally initiated reform attempts which failed

to reach breakthrough, last year the most serious bottom-up protests emerged in Bosnia. Hopes were high again, that the civic initiative may trigger changes in the country, but since then nothing really changed. In our paper we would like to examine briefly the main reasons why Bosnia cannot be an efficient state on Dayton grounds, what are the desired changes and what are those which may be in reach in the near future.

THE COMPLEX POLITICAL-ADMINISTRATIVE STRUCTURE OF BOSNIA AND HERZEGOVINA AND EVALUATION OF THE DAYTON AGREEMENT IN THIS CONTEXT

Authors: *Fatih YAMAN**, Celal Bayar University, Turkey; *Zeynep Selin Acar*

Keywords: Bosnia and Herzegovina, civil war, Dayton Agreement, political-administrative structure

Abstract: Foundations of today's complex political and administrative structure of Bosnia and Herzegovina, was established by the Dayton Agreement that was signed to end the civil war in the country between the years 1992–1995. Therefore, the foundations and the causes of the existing problems need to be based on this treaty, and starting from this point, some solutions need to be offered.

As known, short-term goal of the Dayton Peace Agreement which was signed on 14 December 1995 was to put an end to the civil war in the country. Another object of the Dayton Agreement was to create an environment of lasting peace in Bosnia and Herzegovina and to operationalize the state by the re-established political-administrative structure. But when we look at the ingredients and the essence of the agreement, we see that it does not provide an optimistic picture. This new system which established a complex structure in the country, literally takes Bosnia under a clamp and makes it unable to do something. For instance, in spite of sharing the common historical and cultural fate, Bosnia is unable to recognize Kosovo, which declared its independence in 2008, as a state.

In this respect, in our study, we will examine the highly complex political and administrative situation in Bosnia and try to analyze the new political and administrative system established by the Dayton Agreement.

HOW THE BALKANS LOST THEIR CHALLENGE FOR RECONCILIATION: THE CASE OF VIŠEGRAD

Author: *Antonio Giuseppe Violante**, Department of Cultural and Environmental Heritage, University of Milan, Italy

Keywords: borders, ethnic conflict, ethnicity

Abstract: The Bosnian war ended in 1995. Since then the Bosniak part of Drina's valley, that until 1992 has been inhabited by both Serbian and Muslims, has been almost entirely Serbianized through physical elimination and expulsion of Muslims. The city of Višegrad, an important settlement in Podrinje and home to the XVI century bridge that inspired Ivo Andrić's novel "The bridge on the Drina", is today inhabited by a clear Serbian majority. The municipal authorities and the famous movie director Emir Kusturica wanted and obtained the realisation of Andrićgrad. "A city inside a city" is a theme park showing various architectural styles of Ottoman and XX century Bosnia, under posthumous patronage of the Nobel winner Andrić. This construction is comparable to the Barcelona Pueblo Espanol, a touristic village made of buildings inspired by traditional architecture of various Spanish regions. Such initiative could attract tourists to the city, whose Ottoman bridge has been declared UNESCO heritage of the humanity and is currently under its patronage. However the initiative has been contrasted by the Muslim community for various reasons, especially because it's Serbian nature and being sustained by an intellectual traitor (Kusturica), a born Muslim now Serbian. The city Muslims also contest the lack of recognition by the Serbian authorities of the genocide of Višegrad Muslims which reached it's peak in denial of memorials for the victims while the monument built in honour of the Serbian heroes in the main square is really a legitimisation of their massacres.

MIGRATION OF ROMANI PEOPLE FROM WESTERN BALKAN TO WESTERN EUROPEAN COUNTRIES

Author: *Tatjana Vukelic**, Germany

Keywords: migration, Roma issues, rural space, social innovation, urban changes

Abstract: The paper is to contribute to the discussion on the question of causes and reasons for the current migration movements mainly of members of the Romani minority from the countries of the Western Balkans (Bosnia and Herzegovina, Macedonia, Montenegro, Serbia, Kosovo) in the direction of the Western European countries, in particular to Germany.

The proposed own field research in the concerned countries should provide new information concerning motivation, course and consequences of the current migration. This should especially bring out the political and social conditions in the countries of origin, associated with the migration. In already existing work on Romani migration from Eastern Europe it is hardly dealt with the network structures. Since we are talking here about chain migration the study of networks is likely to lead to new, more extensive knowledge in relation to Romani migrants and Romani migration. My goal in the work is to figure out the underlying reasons for the current migration and immigration to Western countries, but as well to understand the political context, which is directly linked to the research topic. The question of the extent of various networks, as well as questions about the social movements can be best answered by qualitative research methods.

The important questions for the interplay between geography and politics are: What kind of consequences (positive and negative) does the "Romani migration process" have? How can we minimize the "negative" consequences? What can we learn from Romani people? How can they contribute to more value to the community?

THE TURKISH FOREIGN POLICY IN PRACTICE – WHAT HAS BEEN ACHIEVED IN THE BALKANS?

Author: *József György Fekete**, University of Debrecen, Department of Social Geography and Regional Development Planning, Hungary

Keywords: Turkey, Balkans, foreign policy, soft power, theory and practice

Abstract: “Turkey’s strategic interests lie in peace, stability, security, and prosperity in its neighbourhood and beyond. Turkey is in a unique position in geopolitical terms, in the midst of Afro–Eurasia. This vast geography neighbours crisis-prone regions such as the Middle East, the Caucasus, and the Balkans.” The previous quote [1] was from Ahmet Davutoğlu, the Prime Minister of Turkey, who laid down the foundation of the contemporary Turkish foreign policy.

The aim of this paper is to present the contemporary Turkish foreign policy in practice in the Balkans. The basis of the Davutoğlu’s (2001) doctrine is that Turkey’s foreign policy and its relations with its neighbours is determined by the relative location to each country, the geographical distance, the historical and cultural ties, the number of Turkish and Muslim minorities and the economic relations. Principally the geographical conditions, secondly the historical background are the ones, which form the basis of the norm system. In the past decade Turkey has been aspiring to turn the events in the region, for the reason of it does not want to adjust to them. However, in practice the achievements Turkey reached in South-East Europe are rather formal than “practical”. The economic relations between Turkey and the studied countries are still relatively small and disproportionate, but Turkey has an extensive cultural influence on the significantly Muslim-populated areas, for example in the sector of education and the media. [2]

[1] Interview by Mr. Ahmet Davutoğlu published in AUC Cairo Review (Egypt) on 12 March 2012.

[2] “The publication was supported by the SROP-4.2.2.B-15/1/KONV-2015-0001 project. The project has been supported by the European Union, co-financed by the European Social Fund.”

P38 PERIGLACIAL PROCESSES IN HIGH MOUNTAIN ENVIRONMENTS

Organizers: *Balázs Nagy, Urdea Petru*

Location: Room J

SLOT1

Chair: *Urdea Petru*

Schedule: Wednesday, 2 September, 15:00–16:45

TREE-RING BASED RECONSTRUCTION OF MAJOR SNOW AVALANCHES IN THE CENTRAL PART OF THE FĂGĂRAȘ MOUNTAINS, SOUTHERN CARPATHIANS

Authors: *Patrick Chiroiu**, West University of Timisoara, Romania; *Ardelean Adrian Cristian*, Romania; *Mihai Lușșan*; *Alexandru Lucian Onaca*, West University of Timisoara, Romania; *Urdea Petru*, West University of Timisoara, Romania; *Mircea Voiculescu*, West University of Timisoara, Department of Geography, Romania

Keywords: Dendrogeomorphology, Norway spruce, Romanian Carpathians, snow avalanches

Abstract: Snow avalanches are a common natural phenomenon occurring in mountainous regions all over the world. In forested avalanche paths, information on past events are contained in the tree-ring record of affected trees. Dendrogeomorphology is a well established method which uses anomalous tree growth and anatomical reactions of impacted trees to date geomorphic events and study their characteristics. Tree-ring studies have been widely applied in the last four decades for the reconstruction of avalanche chronologies, to assess their frequency, magnitude, spatial spread and climatic triggers.

The present study, conducted on 16 avalanche paths located in the Făgăraș Mountains, Southern Carpathians, Romania, reconstructs the natural snow avalanche regime using dendrogeomorphic techniques. A total of 874 avalanche affected Norway spruce trees (*Picea abies* (L.) Karst) were analyzed yielding 193 major snow avalanches which occurred between 1900 and 2012 in the studied area. Using a regional avalanche activity index, 11 years with increased snow avalanche activity were identified: 1923, 1929, 1952, 1962, 1967, 1988, 1992, 1995, 1997, 2002 and 2005. Subsequently, avalanche synchronicity with values exceeding 50% of the studied paths were obtained for 6 of the above mentioned years. Major snow avalanche return periods between 12,6 and 4,6 years characterize the central part of the Făgăraș Mountains. In the regional context, with a lack of archival records on the manifestation of snow avalanches in Romania, the results of our study provide important information about past occurrences and offer a basis for realistic hazard mitigation and risk management measures.

ICE AND WATER IN THE WORLD’S HIGHEST MOUNTAIN DESERT, DRY ANDES, OJOS DEL SALADO REGION

Authors: *Balázs Nagy**, Eötvös Loránd University, Department of Physical Geography, Budapest, Hungary; *József Kovács*, Eötvös Loránd University, Budapest, Hungary; *László Mari*, Eötvös Loránd University, Budapest, Hungary; *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Keywords: chile, climate change, monitoring network, permafrost

Abstract: The Puna de Atacama plateau is the driest part of the Andes, where volcanoes tower above 6000 m a.s.l making this area one of Earth’s most extreme places. This is the site of the world’s highest volcano, the 6893 m Ojos del Salado, which - without any ice-cap - towers above the extremely dry and cold area of the Chilean-Argentinian border. This area has the highest climatic snow-line on Earth

(around 7000 m a.s.l.). Exactly because of its harshness—the extreme aridity, and low temperatures—it might work as an indicator area of (possible) local warming, of which consequential ice melt and moisture might dynamically change the environment.

Our analyses based on field research, and from 2012 a data logger supported long term monitoring system of the high mountain desert, the (hyper)arid periglacial environment at the highest possible location on Earth, between 4200 and 6893 m. Besides collecting permafrost data, it is also our major goal to analyze active and fossil processes of the alpine desert. We pay special attention to study phenomena of episodically present water and glacier-ice remnants. Also we search for explanations for the presence of extremely high altitude lakes.

Based on our data we gained detailed information about the length and dynamism of freeze-thaw circles, the active layer thickness, the mean annual temperature of active layer (in several depths), the current processes of glacier ice-degradation. We have explanation for the formation of local high mountain lakes and the lack of characteristic periglacial slope processes as well.

THERMAL CHARACTERISTICS AND INTERNAL STRUCTURE OF EARTH HUMMOCKS FROM SOUTHERN CARPATHIANS

Authors: *Alexandru Lucian Onaca**, West University of Timisoara, Romania; *Florina Ardelean*, West University of Timisoara, Romania; *Mircea Ardelean*; *Urdea Petru*, West University of Timisoara, Romania

Keywords: Earth hummocks, geophysical investigations, internal structure, Southern Carpathians, thermal regime

Abstract: Earth hummocks are miniature cryogenic mounds widespread in the alpine domain of Southern Carpathians. These landforms result from the combined, but variable interaction of frost heave, cryoexpulsion of clasts, hydrostatic and cryostatic pressure and cellular circulation. The aim of our study was to examine the regional characteristics of these small dome-shaped hummocks and to better understand the relations between thermal regime, internal structure and actual evolution analyzing a site from Țarcu Mountains (1750 m). 100 mounds were measured at this site, displaying an average of 31 cm in height and a mean length of 132 cm. Contrary to similar studies the earth hummocks from Țarcu Mountains become elongated and coalescent in a particular direction, as a consequence of the intense frost heave and more efficient frost action on northern aspects. This assumption was confirmed by thermic data recorded in the spring of 2013 on both northern and southern side of the earth hummock showing significant differences in the thermal regime. The thermal regime inside one earth hummock was measured during two seasons at 5 different depths. The interval when the action of frost is efficient inside the earth hummock is December-May, whereas maximum depth of frost penetration is between 30 and 40 cm. The internal structure and its seasonal evolution were proved through electrical tomography investigations (ERT). On the other hand, the internal structure elements, some of them connected by cryogenic processes, are related to specific physicochemical characteristics, such as granulometry, vertical and horizontal variation of thermal conductivity, moisture and metal ions content.

ENVIRONMENTAL CONTROLS ON SIZE, SHAPE AND SPATIAL DISTRIBUTION OF ALPINE BLOCK STREAMS

Authors: *Raul David Șerban**, West University of Timisoara, Romania; *Alexandru Lucian Onaca*, West University of Timisoara, Romania; *Urdea Petru*, West University of Timisoara, Romania; *Mihaela Popescu*

Keywords: block streams, morphometry, periglacial landforms, Southern Carpathians

Abstract: Block streams are emblematic landforms in mountain environment. Despite their widespread presence in the alpine domain of Southern Carpathians there is a lack of studies on this particular issue, which inevitably leads to an insufficiency understanding of this phenomenon. The aim of this approach is to investigate the regional characteristics of alpine block streams from Retezat-Godeanu Mountain Group, and to assess the influence of elevation, slope, aspect and lithology on the size, shape and block streams distribution. In total 2056 block streams were mapped, representing the largest existing inventory of these periglacial landforms. The methodology combines field geomorphological mapping and aerial photographs mapping, with statistical and spatial analysis of terrain parameters. The relationships between the involved variables were evaluated using simple and multivariate statistic methods. For a better understanding of the processes involved in their formation and movement the thermal regime of some block streams were recorded by miniature thermistors. Relative-age dating of blocks was attempted by comparing the values of Schmidt hammer rebound and the weathering rind thickness from the upper part, respectively the lower part of the block streams. The results indicated that block streams characteristics (size and shape) and spatial distributions are clearly influenced to a degree by the analyzed environmental control variables (e.g., lithology, elevation, slope, aspect). Based on these results a scenario for block streams formation and evolution in Southern Carpathians was built.

SPATIO-TEMPORAL RECONSTRUCTION OF SNOW-AVALANCHE ACTIVITY USING DENDROGEOMORPHOLOGIC APPROACH IN CAPRA GLACIAL VALLEY – FĂGĂRAȘ MOUNTAINS (SOUTHERN CARPATHIANS), ROMANIAN CARPATHIANS

Authors: *Mircea Voiculescu**, West University of Timisoara, Department of Geography, Romania; *Florina Ardelean*, West University of Timisoara, Romania; *Patrick Chiroiu*, West University of Timisoara, Romania; *Alexandru Lucian Onaca*, West University of Timisoara, Romania

Keywords: geomorphological hazards

Abstract: Snow avalanches are a major hazard in Southern Carpathians (Romanian Carpathians) and cause damage to tourism infrastructure, transportation corridors, forests and losses in human lives. Despite dozens of lives lost due to ignorance on this geomorphologic slope processes, the scientific approach of snow avalanches in Romania is still poor. Therefore, the main objective of this study is to reconstruct spatio-temporal patterns of snow avalanche events and to complement the existent written records on past snow avalanche activity in Capra glacial valley (Făgăraș Mountains) using the dendrogeomorphology approach.

We sampled trees in two snow avalanche tracks located on the eastern slope of the Capra glacial valley, 82 in one and 96 in the other, and obtained 164 and 192 samples, respectively. The analysis revealed that the small and medium snow avalanches (with 10%AAI>20%) cover the central and lateral parts of the stands, whilst the large snow avalanches (with AAI>20% or over 30%) reach the runout zone of the stands. On the same time, we dated past avalanche events and obtained the snow avalanche chronology, that exceeds 100 years and the return period, ranging from 13 to 15 years. Finally, we made some correlations between snow avalanches activity and management of risk snow avalanches in Capra glacial valley.

P39 QUALITY OF LIFE: DISCUSSING THE RECENT GEOGRAPHICAL APPROACHES AND RESEARCH

Organizer: *Ivan Andrásko*

Location: Room B

SLOT1

Chair: *Ivan Andrásko*

Schedule: Tuesday, 1 September, 08:30–10:15

EFFECTS OF CONTEXTUAL AND COMPOSITIONAL FACTORS ON THE EVALUATION OF SUBJECTIVE WELL-BEING

Author: *Yoshiki Wakabayashi**, Tokyo Metropolitan University, Japan

Keywords: GIS, quality of life, spatial analysis

Abstract: During the last few decades, subjective and objective evaluation of happiness or well-being as a quality of life (QOL) indicator has been attracted attentions of social scientists and policy makers. This trend is exemplified as the development of measures of Gross National Happiness (GNH) in Bhutan and Better Life Index (BLI) by OECD as alternatives to the existing indices of economic affluence, namely, GDP. Compared with the previous indicators of QOL which is usually measured objectively, well-being or happiness tends to be measured subjectively being aggregated into an areal unit. Based on the findings of the previous studies that personal attributes (i.e., age, sex, and income) have considerable influence on the subjective evaluation of well-being, population composition of a region can affect the spatially aggregated evaluation of well-being. In addition, evaluation of well-being represented in areal unit is usually affected by the conditions of neighboring areas according to the Tobler's first law of geography. The aim of this study is to examine these compositional and contextual effects by analyzing empirical data from Japan and several OECD countries. Regression analysis of the compositional effect on the subjective well-being at the sub-national level revealed that the population composition have limited effects on the level of subjective well-being. Even after adjusting for the population composition, substantial differences remained in the well-being level across areal units. Spatial autocorrelation analysis detected some spatial clusters with high/low levels of well-being, which indicates spatial dependence of QOL evaluation.

THE ROLE OF TELEMEDICINE IN GEOGRAPHICAL INEQUALITIES OF THE HEALTH SYSTEM IN HUNGARY

Authors: *Attila Bán**, University of Szeged, Department of Economic and Social Geography, Hungary; *Viktor Pál**, University of Szeged, Department of Economic and Social Geography, Hungary; *Gyula Nagy**, University of Szeged, Department of Economic and Social Geography, Hungary

Keywords: health care, inequality, information technology, interviews, telemedicine

Abstract: There is increasing interest shown in telemedicine in health policy and health services why these kinds of healthcare services can extend service availability, accessibility and enlarge effectiveness. All these features are originated from the IT revolution and the constantly decreasing IT prices. Nevertheless, telemedicine is primarily a research speciality of medicine and information sciences, thus it has strong relations with geography, since it results distanceless in health services. Telemedicine can be even more important in regions where health services are not accessible or the availability is insufficient. In general geographical aspects of telemedicine are not taken into consideration in telemedicine literature, or if so the emphases are not put on distance, space and place which can seriously affect regional health care service inequalities. For this reason this paper aims to highlight how telemedicine can change the socio-spatial features of health services and how it influences health disparities within a country. In this research qualitative method was applied, semi-structured interviews were made with Hungarian doctors who use telemedicine and practice in state hospitals. Telemedicine can reduce spatial disparities in health service system caused by doctor shortage according to the results of the interviews. However telemedicine cannot replace face-to-face health services. Therefore telemedicine has several and multiple positive effects on the health systems but it can easily recreate spatial inequalities in healthcare.

DETERMINING INTRA-URBAN DIFFERENCES OF QUALITY OF RESIDENTIAL ENVIRONMENT: A CASE STUDY OF SELECTED SLOVENIAN CITIES

Author: *Jernej Tiran**, Slovenia

Keywords: GIS, residential environment, spatial analysis, urban geography

Abstract: Urban residential environment has been recognized as an important domain of urban quality of life. It also has implications on sustainable urban development, residential mobility, and social-spatial segregation. Basing the analysis on different

social theories of human needs and the concept of sustainable urban development, the residential environment was classified into seven domains: dwelling characteristics, safety, social environment, air and noise pollution, accessibility to urban amenities, traffic conditions, and aesthetics. The geographical information system (GIS) was applied to overcome the lack of some spatial data; it was also used to calculate the results at the micro-scale level. The most innovative part of the analysis was walkability modelling, which was based on a distance-decay concept and the subjective perceptions of how important various urban amenities are and what is the acceptable distance to them. The final results were also combined with weights, which were based on people's subjective perceptions of the importance of individual indicators; they were then compared with residents' perceptions of the quality of the residential environment in certain types of neighbourhoods. This approach could be a possible way to determine the spatial differences of urban residential quality.

NEIGHBORHOOD ENVIRONMENT AND QUALITY OF LIFE IN PRAGUE'S TEENAGERS: A PILOT STUDY OF BUILT ENVIRONMENT'S EFFECTS ON HEALTH BEHAVIOR IN A POST-COMUNIST CONTEXT

Author: *Jana Spilková**, Charles University in Prague, Faculty of Science, Czech Republic

Keywords: health risk behavior, neighborhood, post-socialist city, quality of life, teenagers

Abstract: The characteristics of neighborhood we live in can significantly influence his/hers quality of life and health. This paper aims to analyze the differences of health risk behaviors (HRB) in youth residents of different neighborhood types within Prague, capital of the Czech Republic, in relation to their perception of built environment, quality of their school and home environments.

The data is based on the survey among elementary school students aged between 14–15 years, which was administered in 19 selected schools in Prague. Respondents were asked their opinions on various issues related to their HRB, about their indoor and outdoor housing and school environments. Factor analysis with was applied to determine the underlying structure in the variables. A consequent field research was conducted to map the opportunity hot spots around the elementary schools.

Binge drinking has been reported mainly by the students living in the housing estates with blocks of flats. The most frequent occurrence of daily smokers was found in the neighborhoods of old city apartment houses. High prevalence of risky marijuana use almost in all the surveyed types of neighborhoods. The respondents were more critical in their evaluation of school characteristics. The neighborhoods critically evaluated by the students as regards the school outdoor environments were the older apartment houses in the historical centre and inner city, the school indoor environment was worst assessed within the housing estate neighborhoods.

Our results suggest that perceptions of problems in both residential and school environment are associated with health behaviors, inequalities in health and quality of life.

ANALYSIS OF FOOD SECURITY – CASE STUDY FROM SLOVAKIA IN STROPKOV DISTRICT

Authors: *Anna Mydlova**, Department of regional geography, Comenius University Bratislava, Slovakia; *Ladislav Tolmaci*, Slovak geographical society, Slovakia

Keywords: food consumption, food security, local food, Slovakia

Abstract: For humans and society has food a vital meaning. It means that food security is a very actual problem, which belongs to global problems. Measuring food security is based on a wide range of indicators that affect the economy, agriculture, population health, and so on. Institutional and legislative framework is created to build food security and food policy. Its aim is to secure food access for everyone, in every region and every time. Availability of food for people in the food system is resulting from the interaction between production, distribution, marketing and consumers. The analysis is based on a study of the food system in which the interaction is taking place within a defined territory. Research of food security in the region is based on three pillars: analysis of the food system and food network in the region, analysis of selected economic and social indicators such as poverty rate, average income, unemployment rate, the share of expenditure on food; education; transport infrastructure etc., and questionnaire survey of individual consumption / food consumption at the household level.

SLOT2

Chair: *Ivan Andráško*

Schedule: Tuesday, 1 September, 10:45–12:30

SMALL-AREA POPULATION MICRODATA ESTIMATION FOR DISASTER MANAGEMENT AND MITIGATION PLANNING

Author: *Kazumasa Hanaoka**, Tohoku University, Japan

Keywords: happiness, Japan, microsimulation, natural disaster, small-area

Abstract: Recently, Japan experiences various types of brutal disasters such as typhoon, flooding, high-tide, heatwave, heavy snows, cyclone, volcano eruption and landslide across the country. It is anticipated that during next 30 years, big earthquakes and tsunami will hit three metropolitan areas (Tokyo, Nagoya and Osaka). Disaster planning and management such as securing evacuation routes, preparation of stockpile and prior reconstruction planning are thus important for mitigating such disaster impacts. To conduct such detailed analysis of population, it requires microdata of individuals and households covering entire affected areas by natural disasters. However, there is no single database which provides population microdata that contain demographic and socioeconomic attributes as well as cover broad geographical areas at the neighborhood level. Therefore, the aim of this presentation is to present our ongoing project on generating small-area population microdata for large-scale disaster management and mitigation planning.

PERCEPTION OF ENVIRONMENTAL HAZARDS IN THE CONTEXT OF QUALITY OF LIFE

Author: *Kamila Klemešová**, Masaryk University Brno, Czech Republic

Keywords: Czech Republic, environmental hazard, floods, perception, quality of life

Abstract: The issue of environmental hazards is a pressing topic worldwide. Changes in the society as well as growing awareness and globalization in the world result in certain changes in the perception of environmental hazards. In spite of these changes, the view of environmental hazards in terms of climate change prevails. The evaluation of social aspects and quality of life in endangered areas is often brought to the fore only during subsequent evaluation of damage and possibilities of recovery area.

The paper aims at the problem of floods in the Czech Republic. Floods are a hazard which poses greatest threat as a result of the situation and natural conditions in the Czech Republic. The aim of the paper is to point out the changes that occur in this area in recent years by means of evaluation of flood management development. The departure from purely technical solutions to multicriterial evaluation of floods stresses the problem of frequent absence of the research dealing with quality of life in endangered areas. Thus the implementation of flood protection fails to meet the needs of inhabitants and is not understood by them. We can assume that the perception of floods as part of the evaluation of quality of life will become an important part of flood management in the Czech Republic in the near future.

GEOGRAPHICAL RANGE OF EVERYDAY ACTIVITIES IN SMALL SETTLEMENTS OF HUNGARY: THE QUALITY OF LIFE VIEWPOINT

Author: *Balázs Kiss**, University of Pécs, Institute of Geography, Department of Human Geography and Urban Studies, Hungary

Keywords: quality of life, rural space, transport

Abstract: In a geographical point of view, quality of life is determined by the opportunities and limitations imposed by a given society, which may or may not allow individuals to take part in it; moreover, to seek happiness. We believe that in this sense access to services (like education, work, healthcare, etc.) allowing to live a whole life has a great deal of importance. The decline of population in rural areas results in shortcomings of these vital services, which leads to the fall of quality of life perceived by rural inhabitants. This implies that transportation opportunities have a crucial impact on accessing these services. Our research focuses on the how this issue affects people living in settlements with less than 100 inhabitants, and how they seek to address this matter. We are also taking a look at how the populations' geographical range of common activities is shaping with special attention given to the effects on their everyday life, and ultimately, on their quality of life. We are focusing on Hungarian settlements, especially those located in areas with insufficient connection to main transportation networks. Our work contains statistical data analysis and focus group interviews. We believe that the combination of different methods helps us to better understanding of the nature of the phenomenon described earlier.

WHOSE QUALITY OF LIFE? ACTOR-NETWORK-THEORY RESEARCH ON (NON-)HUMAN COLLECTIVES IN SUBURBS

Author: *Jaroslav Biolek**, Masaryk University, Czech Republic

Keywords: actor-network theory, collective quality of life, ethnomethodology, ethnography, suburbanization

Abstract: Together with the research on both suburbanization and quality of life there arises a crucial question, i.e. whose quality of life we actually investigate. From the standpoint of actor-network-theory, a suburb can be seen as a hybrid assemblage of houses, cars, gardens, plans of developers, suburban residents as well as their visions. In order to do research on the quality of life in the suburbs it is necessary to follow socio-spatial connections of all the actors and, consequently, to analyze how they are produced. Therefore, we, as ANT geographical researchers, are supposed to study the social-technical set-up of a suburb, how it is planned, built, networked and, of course, lived to understand the collective quality of life. However, we dispose of not only the means of analyzing the actors' relations and their power but also of tools for reassembling these collectives of suburbs.

The paper presents a methodological attempt to follow interrelations in the suburb to understand how its quality of life is being created. The aim of this presentation is to demonstrate how we, as ANT geographical researchers, could take into account all the actors and their mutual relations and carry out this kind of investigation with application of ethnographical and ethnomethodological techniques. Thereby, this experimental research was not only focused on everyday practices of suburbanites but also followed and analyzed linkages to architecture studios, local councils, bureaus of land-use planners and investors, houses of denizens, services, stores, agriculture companies etc. In conclusion, consequences of such approach are discussed.

DEVELOPMENT POLICIES IN THE CONTEXT OF SUBJECTIVE WELL-BEING DISCOURSES

Author: *Dénes Komjáthy**, Hungary

Keywords: policy, quality of life

Abstract: Nowadays, issues of subjective well-being and quality of life are becoming more important in each levels of regional and urban development. During the measurement of impact and success of development interventions, professionals should take these issues into consideration. The topic of subjective well-being is in most cases investigated in an empirical way, by quantitative methods. Postmodern method of discourse analysis can give new impetus for the geographic research of the topic, and it can throw new light upon many related issues, as well. In what extent has the topic been incorporated in the Hungarian regional development policy? What kind of methods do we use nowadays for measuring subjective well-being and quality of life? What are the most important indicators? How does the topic of subjective well-being and quality of life live in the opinion of the public?

What are the most important elements of these discourse? Whether are these issues emphasized satisfactorily during the measurement of development interventions? Whether are the concerned inhabitants feeling themselves really better as a result of such an intervention? Why can an intervention achieve the desired effect or why that can not achieve either? What are the geography's potential breakthroughs in the investigation of this topic? In the framework of my presentation I try to answer these questions.

THE RESEARCH OF QUALITY OF LIFE IN GEOGRAPHY: ON RECENT APPROACHES AND FUTURE DEVELOPMENTS

Author: *Ivan Andráško**, Masaryk University, Czech Republic

Keywords: applied research, geography, methodology, quality of life, theory

Abstract: During the past decades, geography has undergone important changes. Especially the development of human geography was (and still is) connected with the process of internal diversification, resulting in the heterogeneity of the discipline. As part of this process, a lot of new or "less traditional" concepts and approaches have emerged and flourished. One of such concepts can be considered the quality of life, which became a stable part of geographical inquiry and tends to form its own specific field of research.

The principal aim of the paper is to provide a brief overview of the philosophical and theoretical aspects in the concept of quality of life and their connection to key geographical concepts. Particular attention will be paid to recent as well as newly emerging and up-and-coming approaches applied in geographical research of quality of life. A few concluding comments will also be devoted to the questions dealing with the so-called problem oriented or applied research of quality of life.

P40 REGIONAL CLIMATE CHANGE IN EUROPE

Organizers: *Judit Bartholy, Kornélia Radics*

Location: Room I

SLOT1

Chairs: *Judit Bartholy, Kornélia Radics*

Schedule: Wednesday, 2 September, 08:30–10:15

ANALYSES OF TEMPERATURE AND PRECIPITATION EXTREME INDICES IN THE CARPATHIAN REGION IN THE PERIOD 1961-2010

Authors: *Monika Lakatos*, Hungarian Meteorological Service, Hungary; *Zita Bihari, Tamas Kovacs**, Hungarian Meteorological Service, Hungary; *Sándor Szalai, Tamás Szentimrey*

The spatio-temporal changes of climate extremes can be implemented by the analysis of observations with high quality and representative in time and in space alike. Climate indices are used in several projects on climate change as prevailing indicators of changes in extremes. The harmonized data derived in CarpatClim project has enabled the presentation of the most comprehensive picture of trends of extreme temperature and precipitation indices in the Carpathian Region. In the frame of the project the digital climate atlas of the region was produced. The common used methods and software in the project was the method MASH (Multiple Analysis of Series for Homogenization; Szentimrey) for homogenization, quality control, completion of the observed daily data series; and the method MISH (Meteorological Interpolation based on Surface Homogenized Data Basis; Szentimrey and Bihari) for gridding of homogenized daily data series.

A set of climate indices derived from daily temperature and precipitation data, focus on extreme events are computed and analysed in this study. Seasonal and annual indices for the period 1961–2010 are presented on maps and tables. Trends in the gridded fields are calculated, mapped and tested for statistical significance. Results show significant changes mainly in temperature extremes associated with warming. The large part of the region show a significant decrease in the annual occurrence of cold nights and obvious increase appears in the annual occurrence of warm nights. Precipitation changes show more variable picture, the changes are much less spatially coherent compared to the temperature change.

ANALYSIS OF COLD EXTREME AND VARIABILITY INDICES RELATED TO AIR TEMPERATURE IN THE ROMANIAN CARPATHIANS AND INTRA-CARPATHIAN AREAS

Authors: *Adina-Eliza C Croitoru**, Babes-Bolyai University, Romania; *Adrian Piticar*

Keywords: climate change

Abstract: This research is part of a larger project on climate changes in Romania. Changes in daily extremes events is one of the most important topic in climate literature and many studies have been conducted so far at local or regional scale worldwide. In this article, the Carpathian and intra-Carpathians regions of Romania were considered. This study is focused on analyzing the trends of daily extreme temperature indices at a regional scale over a period of 50 years: 1961–2010. Data sets of daily minimum and maximum temperature recorded in 10 weather stations were analyzed. The main goal was to find changes in daily extreme temperatures by using a set of 11 indices: 8 indices related to cold extreme temperatures and three indices related to variability in minimum-maximum daily temperatures. The indices were adopted from the core indices developed by ETCCDMI with appropriate modifications to suit to the analyzed territory. The main results suggest that the climate has become warmer during the last decades in terms of cold extremes, while no spatial coherence in trend was identified in variability indices series.

CONTEMPORARY CHANGES IN PRECIPITATION EXTREMES IN POLAND IN COMPARISON TO CHANGES IN OTHER PARTS OF BALTIC SEA BASIN

Authors: *Joanna Wibig*, University of Lodz, Poland; *Joanna Jędruszkiewicz**, Institute of Geography, Pedagogical University, 30-084 Kraków, ul. Podchorążych 2, Poland

Keywords: Baltic Sea Basin, climate change, extreme precipitation events

Abstract: The aim of the paper is detection and attribution of changes in precipitation extremes in Poland on the ground of similar changes in the rest of Baltic Sea Basin. The indices defined by the Expert Team on Climate Change Detection and Indices (ETCCDI) are computed for a number of stations from Poland and surrounding countries. Among them are: Monthly maximum 1-day precipitation (Rx1day), monthly maximum consecutive 5-day precipitation (Rx5day), precipitation intensity index (RRw), annual number of days with daily precipitation ≥ 10 mm and ≥ 20 mm (R10mm and R20mm), maximum length of dry spell (CDD), maximum length of wet spell (CWD), annual total from days when daily total is equal at least 95 percentile and 99 percentile calculated in reference period 1961-1990 from daily totals equal at least 1 mm (R95pTOT and R99pTOT). The daily precipitation records from more than hundred stations from the period 1951-2012 were used. The changes in annual values and their variability are analysed. The regions of similar changes are distinguished both for Poland and for the whole Baltic Sea Region. In the second part of the paper the attribution of large scale mechanisms causing detected changes is planned. The set of possible large scale predictors is prepared. Among them are indices of atmospheric and oceanic circulation in the European-North Atlantic Region: the North Atlantic Oscillation index, The Scandinavian index, the East Atlantic index, and the Atlantic Multiannual Oscillation. Additionally the large scale fields of sea level pressure and humidity and temperature from low troposphere are used. The records of indices were taken from NCDC (<http://www.cpc.ncep.noaa.gov/data/teledoc>). The large scale fields data were taken from NCAR/NCEP Reanalysis. Among the methodologies used to detect the mechanisms of precipitation extreme changes are: correlation analysis, composites and Canonical Correlation Analysis. The work is supported by grant 2012/05/B/ST10/00945 founded by Polish National Science.

SPATIAL PATTERN OF RECENT RAINFALL TRENDS IN SERBIA (1961–2009)

Authors: *Jelena Lukovic**, University of Belgrade, Faculty of Geography, Serbia; *Branislav Bajat*; *Dragan Blagojević*; *Dejan Filipović*; *Milan Kilibarda*

Keywords: rainfall trend, Serbia, spatial patterns

Abstract: This study examines a spatial pattern of annual, seasonal and monthly rainfall trends in Serbia. The study used data from 63 weather stations between the period of 1961–2009. The rainfall series was examined by applying the nonparametric method of the Mann–Kendall test and Sen's method to determine the significance and magnitude of the trends. Significant trends have not been detected for the whole country at an annual scale. Seasonal trends at the confidence level of 97.5 %, however, indicate a slight decrease in winter (5 stations out of 63) and spring (7 stations out of 63) precipitation and an increase in autumn precipitation (10 stations out of 63). Results for monthly rainfall trends also generally showed a nonsignificant trend with the exception of a negative trend in May (6 stations out of 63) and positive trend for October (9 stations out of 63). Calculated global autocorrelation statistics (Moran's I) indicate a random spatial pattern of rainfall trends on annual, seasonal and monthly timescales with exceptions for March, June and November. Overall, results suggest that only weak, mostly nonsignificant trends are present in Serbia in the period 1961–2009.

*Results of this paper are already published in *Regional Environmental Change*, 14 (5), 1789-1799.

REGIONAL CLIMATE MODEL VALIDATION STUDY FOR EUROPEAN REGIONS

Authors: *Judit Bartholy**, Dept. of Meteorology Eötvös Loránd University, Hungary; *Karolina Andre*; *Ildiko Pieczka*; *Rita Pongrácz*, Dept. of Meteorology Eötvös Loránd University, Hungary

Keywords: med-cordex domain, model RegCM, parametrization, subgridding, temperat

Abstract: In the framework of the Med-CORDEX international initiative our research group is contributing with RegCM4.3 experiments at 50 km horizontal resolution using the mosaic-type subgridding option in order to take into account subgrid processes. For this purpose, we used ERA-Interim data (1981-2010) and HadGEM2 global model outputs (1951-2005) as initial and lateral boundary conditions (ICBC) for the entire MED-44 CORDEX area covering the extended Mediterranean region of Europe. In order to quantify the impact of the use of different parameterization schemes on regional climate model outputs, hindcast experiments are completed applying the RegCM4.3 model to the Carpathian Region and its surroundings at 10 km horizontal resolution with three different cumulus convection schemes (i.e., Kuo, Emanuel, and Grell schemes with different closure methods). Besides, sensitivity of outputs for subgrid-scale processes is also studied by activating the subgrid Biosphere-Atmosphere Transfer Scheme (BATS) model within other RegCM experiments.

RegCM simulation results are sensitive to the driving data since the completed experiments with ERA-Interim and HadGEM2-driven 50-km outputs as ICBC result in different bias patterns. However, when the same driving data are used with different specific set-ups, the simulation results look quite similar. To some extent RegCM is able to reduce the errors inherited from the global datasets. Our validation results for temperature and precipitation suggest that for the Carpathian Region the overall best performance is achieved when using the mixed Grell-Emanuel scheme together with Fritsch & Chappell closure. Moreover, turning the subgrid model on improves additionally the model performance, since surface climatology is better reproduced when it is activated than it is deactivated.

UNCERTAINTY ASSESSMENT BASED ON RESULTS OF GLOBAL AND REGIONAL CLIMATE MODELS

Authors: *Gabriella Szepszo*, Hungarian Meteorological Service, Budapest, Hungary; *Péter Szabó**, Hungarian Meteorological Service, Hungary

Keywords: RCM, regional climate modelling, uncertainty

Abstract: The climate dynamics activities at the Hungarian Meteorological Service (HMS) started in 2004 based on two regional climate models (RCMs): the climate version of the ALADIN weather prediction model and the REMO model developed by the Max Planck Institute in Hamburg. The two RCMs are used to investigate the climate change over the territory of Hungary. Simulations were carried out over Europe, Central and Eastern Europe, and the Carpathian Basin on 10, 25, 50 km horizontal resolutions for 1951–2100, applying RCP scenarios in the recent experiments.

Climate projections have uncertainties originating mainly from the description of anthropogenic activity and physical processes. The model outcomes can be interpreted in a correct way solely by quantification of these uncertainties, as well. Therefore, climate projections of ALADIN-Climate and REMO are supplemented with other model results. Based on the outputs of different global climate models and the RCMs of the ENSEMBLES and EURO-CORDEX co-operations, an assessment is carried out to identify the main sources of uncertainty over different temporal and spatial scales, with special focus on the Carpathian Basin.

The presentation aims at giving an overview on the investigated scientific issues and some practical challenges raised during the application of RCM results.

EVALUATION OF ESTIMATED CHANGES IN PRECIPITATION-RELATED EXTREMES USING RAW VS. BIAS-CORRECTED REGIONAL CLIMATE MODEL OUTPUTS

Authors: *Rita Pongrácz**, Dept. of Meteorology Eötvös Loránd University, Hungary; *Judit Bartholy*, Dept. of Meteorology Eötvös Loránd University, Hungary; *Anna Kís*

Keywords: Carpathian region, climate index, daily precipitation, future trend

Abstract: Global climate change results in overall higher temperature values, modified distribution of regional precipitation, frequency and intensity changes of extreme weather events. For global climate trend analysis century-long simulations of general circulation models (GCM) provide important information. However, regional or local scale based impact studies require more detailed spatial information than what GCMs are capable to offer. Therefore, it is essential to downscale GCM outputs using regional climate models (RCM), especially, in case of meteorological elements with high spatial and temporal variability, such as precipitation.

The focus of this paper is on precipitation extremes since both the lack and the excess of precipitation may result in severe environmental consequences, and even economical losses. The projected trends of drought- and precipitation-related climate indices (i.e., describing drought events, and intensity of precipitation exceeding different percentile-based or absolute threshold values, respectively) for 1961–2100 are compared when using (i) raw simulation data of RCMs and (ii) after applying a percentile-based bias correction to them using the gridded CarpatClim (CC) database as a reference. For the evaluation, daily precipitation data of 11 RCM simulations from the ENSEMBLES project are used taking into account the A1B emission scenario. The climate index values are calculated for the entire Central European region, however, the bias correction is possible only on the CC domain covering Slovakia, Hungary, South-western Ukraine, Western Romania, and Northern Serbia. Estimated annual and seasonal changes of the indices are determined for 2021–2050 and 2071–2100 relative to the 1971–2000 reference period.

ANALYSIS OF FUTURE WIND CLIMATOLOGY BASED ON REGIONAL CLIMATE MODEL PROJECTIONS

Authors: *Judit Bartholy**, Dept. of Meteorology Eötvös Loránd University, Hungary; *Csilla Peline Nemeth*, *Rita Pongrácz*, Dept. of Meteorology Eötvös Loránd University, Hungary; *Kornélia Radics*, Hungary

Keywords: bias correction, carpatclim data, extreme wind, mean wind, model RegCM

Abstract: Due to intense human presence and various anthropogenic activities, global climate change has been detected. Increasing temperature values and an overall warming is projected, which will certainly affect global circulation patterns and regional climatic conditions throughout Europe. As an indirect consequence, global warming may also alter the wind climate in the Carpathian Basin. In order to provide reliable projections for the future, the first task is to analyse wind climatology of the recent past using various tools from mathematical statistics. This analysis includes both mean and extreme wind conditions, which can be done via climate wind indices. Then, the detailed analysis continues with assessments of future changes on the basis of regional climate model simulations embedded in global climate models.

In this paper detailed analysis of observed wind fields, trends of different percentiles, return values, wind indices and their spatial distributions are discussed over Hungary using the homogenized and gridded CarpatClim database. In addition, simulated wind climate variability is evaluated for the future periods of 2021–2050 and 2071–2100 relative to the 1961–1990 reference period. Since projected wind speed is highly overestimated by the simulation of the regional climate model RegCM for the reference period (1961–1990), a bias correction is necessary to apply to the raw simulated wind data using CarpatClim as a reference database. The bias correction method is based on fitting the empirical cumulative density functions of simulated daily time series to the observations for each gridcell using monthly multiplicative correction factors.

IMPACT OF CLIMATE ON WINE QUALITY AND QUANTITY IN THE MATRA REGION

Authors: *János Mika**, Eszterházy Károly College, Hungary; *Lajos Gál*; *István Kósik*; *András Rácsi*

Keywords: climate change, precipitation, sunshine duration, temperature, wine

Abstract: Viticultural regions for quality wine production are located in relatively narrow climatic niches, that put them at greater risk from climate change than other broader acre crops. Our target area, the Matra Region is fairly close to the edge of optimal wine production concerning its climate conditions. Fifty year (1961-2010) wine quantity (t/ha) and quality (natural sugar content, in weight % of must) data are analysed in themselves and further compared to parallel climate variables. One set of station-based temperature, sunshine duration and precipitation data are taken from a neighbouring station, Eger Kolyukteto, and grid-point data by CarpatClim Project (www.carpatclim-eu.org/pages/home) are also used for comparison. By now it is clear that (1) wine amount is a year-by-year varying combination of natural productivity and man-made attempts to achieve better quality by thinning the grape clusters in spring. Therefore we separated a 30 years and a 20 years part breaking them by 1991. (2) However, wine quantity does not show considerable correlation with any of the parallel climate variable in either period. (3) Wine quality, however, is in significant negative correlation (regression) with the annual precipitation and positive correlation with temperature and sunshine duration. (4) Applying interpolated site-specific areal averages from the grid-point data, one may receive the qualitatively the same results but with higher significance of both the correlation and the regression coefficients. (5) Combining these results with the expected climate changes in Hungary, for the next few decades one may expect considerably better wine quality in the Matra region.

P42 RIVER AND FLOODPLAIN REHABILITATION

Organizer: *Dénes Lóczy*

Location: Room J

SLOT1

Chair: *Dénes Lóczy*

Schedule: Tuesday, 1 September, 15:00–16:45

INTERACTIONS BETWEEN VEGETATION AND FLUVIAL FORMS IN THE CENTRAL EUROPEAN RIVERS

Authors: *Ján Babej**, Masaryk University, Czech Republic; *Karel Brabec*; *Petr Halas*; *Zdeněk Máčka*

Keywords: diversity, ecology, geomorphology, gravel-bed river, natural factors, Slovakia, statistical analysis, The Czech Republic

Abstract: Currently, we find very few comparative studies examining the relationship between vegetation, abiotic factors and fluvial processes in rivers located in different areas. This study clarifies the relationships and links between vegetation, morphological forms and sediments of three submontane rivers in the Czech Republic (the Bečva, the Opava) and Slovakia (the Belá). For both Czech rivers renaturalized sections incurred after the flood in 1997 were selected, in case of Belá natural segment with minimal human impact (the channel patterns: Bečva – pseudomeandering channel, Opava – sinuous channel with bars, Belá – wandering channel). For each river 50 phytosociological relevés were performed, and for each relevés following variables were collected: the elevation above the channel bed, horizontal distance to the channel, depth of permeable layer, slope and grain size of surficial and subsurface layers. In the case of subsurface layers were provided physical-chemical analysis (dry matter content, pH in KCl, content of carbonates, conductivity, total dissolve solids) and the content of nutrients (N_{tot}, Cox, Ct_{ot}, P, Ca, Mg, Na, K, Mn, Fe, Cu, Zn). Analyses were done in the program R to point to out a differentiation of plant species on the basis of fluvial forms. Similar results were obtained for the content of nutrients, which is rising from channel bars to islands, berms and floodplain. However, in case of the Belá River this relationship is less evident.

ADAPTING THE DUTCH ROOM FOR THE RIVER APPROACH IN ALBERTA, CANADA

Authors: *Eva A. Bogdan**, University of Alberta, Canada; *Andrew Wilson*

Keywords: engineering, flood risk, flood zones, floods, land use, local development, nature conservation, riverfront, urban planning

Abstract: The application of the Dutch Room for the River approach, which focuses on increasing river conveyance and reducing risk, is currently being explored in the province of Alberta, Canada. The province experienced major flooding in 2013, the most costly natural disaster in the history of Canada. Alberta, home to the largest oil sand operations in the world, has had the strongest performing economy in Canada in recent decades and historically focused on large-infrastructure mitigation approaches.

The estimated \$6 billion cost of the disaster, excluding mitigation expenses, and a growing sensitivity to the implications of climate variability, has triggered reassessment of costly structural solutions. These solutions are seen as having significant impact on the environment. There is a growing focus on non-structural solutions including removal of artificial channel constrictions, conservation easements, restoration and retention of wetlands and riverbanks, floodplain development restrictions, and relocation.

Initial exploration and adaptation of the approach to Albertan conditions involved stakeholder input from water managers, watershed and environmental groups, municipalities, experts, and interested public. This research examines the process of applying and adapting the Dutch Room for the River approach to the development and evolution of Alberta's flood and watershed management.

TPOLOGY OF RIVER BANKS WITH EROSION HAZARD ON THE LOWER TISZA RIVER

Authors: *Éva Kis*, Geographical Institute HAS, Hungary; *Dénes Lóczy**, University of Pécs, Department of Physical and Environmental Geography, Hungary; *Ferenc Schweitzer*, Geographical Institute, HAS, Hungary; *János Balogh*, Geographical Institute HAS, Hungary; *József Szeberényi*, Geographical Institute, RCAES HAS, Hungary; *István Viczián*, Geographical Institute, Research Centre for Astronomy and Earth Sciences of the HAS, Hungary; *Tímea Prodan*, Geodetic and Geophysical Institute, RCAES, Hungary

Keywords: bank erosion, alluvial sequence, tectonic influence, regulated river, water regime, Tisza, Hungary

Abstract: The heavily regulated Tisza River provides ample opportunities for the study of bank erosion, its circumstances, rates and types. Geomorphological conditions particularly favour various types of bank failure along the lower Hungarian section, between Csongrád and Mártély, where the present course of the river is partly determined by the tectonic environment, river regulation measures and geomorphic self-regulation (channel adjustments after channelization). The stability of the banks is fundamentally influenced by their sedimentology, but climate change has several indirect influences on riverbank slides and collapses. The impact of weather extremes on bank erosion, manifested in river regime, is also studied. With hydrometeorological extremities expected to intensify in the future, bank erosion is becoming a more and more severe hazard along some reaches. Its actual dimensions are estimated by the Bank Erosion Hazard Index (BEHI). Implications for flood defence and actual construction activities in towns built right on the river banks are also presented.

The paper aims at identifying the origin, mechanisms and types of mass movements along the riverbank and the role of geological (tectonic, sedimentological and geomorphological) and hydrological (river regime and groundwater dynamics) factors in their generation. General predictions of the future spatial and temporal distribution of bank erosion hazard and opportunities for mitigation are also covered in the paper.

UNCONTROLLED URBANIZATION AND GEO-HYDROLOGICAL HAZARD IN THE LIGURIAN CATCHMENTS: A CASE STUDY FROM THE RAPALLO FLOODPLAIN

Authors: *Paola Giostrella**, Irpi Cnr, Italy; *Francesco Faccini*, University of Genoa, Italy; *Lara Fiorentini*, Municipality of Genoa, Italy; *Massimo Melillo*; *Elisabetta Napolitano*; *Michele Santangelo*

Keywords: geo-hydrological risk, heavy rainfall, mediterranean area, Rapallo, urbanization

Abstract: The Ligurian Floodplains are historically subject to disastrous floods due to the weather and climate-related depression of the Gulf of Genoa, and also as a result of the geographical and physical conditions of their catchment areas, related to the slope and exposure, and use of soil. Changes in the rainfall patterns and the uncontrolled building in high, hazardous areas have contributed to increased risk of geo-hydrological conditions. The contribution covers the symbolic case study of Rapallo City: the term “rapallizzazione”, which has now entered the Italian vocabulary, is indicated in the fact that the phenomenon of uncontrolled urbanization. In 1861, there were 10,000 inhabitants, this number grew to 30,000 in 1981, the urbanized area has increased from 0.18 km² to 6 km², resulting in a degradation of the landscape. The Rapallo plain, determined mainly by basin T. Boate (26 km²), and in the alternative to those of T. San Francesco (6 km²) and T. Thuja (3.4 km²), is historically prone to flooding; in the last hundred years there have been more than ten catastrophic floods documented. The geo-hydrological problems related to the Rapallo uncontrolled urban growth can be exemplified by four main geomorphological issues: modifications in land-use, changes from being predominantly agricultural to urbanized; variations in the flood channel width of the streams with narrowing of the useful discharge section; progradation of the coastal plain towards the sea with fills and embankments; total diversion of the natural riverbed and concentration of surface runoff in new more restricted areas.

SLOT2

Chair: *Dénes Lóczy*

Schedule: Tuesday, 1 September, 17:15–19:00

FLOODS IN THE BALKANS

Author: *Magdalena Latinovic**, Serbia

Keywords: floods, Serbia

Abstract: The catastrophic floods, caused by the highest precipitation amounts recorded so far, created enormous damage in the Balkans.

Countries affected by this natural disaster were Serbia, Bosnia and Herzegovina and Croatia. The main cause of this excessive rainfall, which in some towns exceeded even one-third of annual amount, was moving of the strong cyclone across the Balkans. The rainfall contributed the increase of groundwater level which additionally caused the erosion of soil and activation of landslides. State of emergency was declared in all three countries and the damage was enormous. Unfortunately, frequent floods are becoming common, and they occur as a result of climate changes which are more and more evident year by year. Even though it is impossible for people to go against nature, they can still do their best to reduce the aftermath.

ASSESSMENT OF FLOODPLAIN REHABILITATION ON THE DRAVA FLOODPLAIN

Author: *Dénes Lóczy**, University of Pécs, Department of Physical and Environmental Geography, Hungary

Keywords: antropogenic landscape forming, landscapes, rural development plan, sustainability

Abstract: The Hungarian Drava floodplain has suffered large-scale landscape degradation in recent decades. Desiccation involved the decline of agriculture accompanied with social and employment problems. To counter deleterious processes, a comprehensive

landscape rehabilitation project, the Ancient Drava Programme, focusing on the improvement of water availability of the floodplain through replenishment from the main river channel, was launched. The water replenishment scheme is meant to take advantage of a network of abandoned drainage elements (oxbows, old beds) in the floodplain. It is coupled with an ambitious rural development project with the long-term objective to significantly improve economic (employment), social (integration of ethnicities) and cultural (preservation of cultural heritage and its utilization for increasing tourism potential). In our research rehabilitation potential is used to assess the efficiency of the water replenishment scheme. Rehabilitation potential is a measure of the extent to which various ecosystem services/landscape functions are fulfilled. The research methods are a baseline survey before and monitoring during implementation of water availability and landscape changes (e.g. vegetation and soil dynamics) in the test area (the Cún-Szaporca oxbow). Preliminary results show that, if water losses by seepage to groundwater and by the evapotranspiration from water surfaces and vegetation are fully taken into account, water replenishment in itself would prove largely insufficient to achieve the rehabilitation goals.

Financial support from the Hungarian National Scientific Research Fund (OTKA, K 104552) and the Visegrad Fund (31210058) is acknowledged.

AN INTEGRATED GEOMORPHOLOGICAL-ECOLOGICAL APPROACH OF CHANNEL SYSTEM CHARACTERIZATION: A TOOL TO PROMOTE CHANNEL RECOVERY AND FLOODPLAIN ECOSYSTEMS

Authors: *Vittoria Scorpio**, Università degli Studi del Molise, Italy; *Pietro P.C. Aucelli*; *Anna Loy*; *Carmen M. Rosskopf*

Keywords: channel adjustments, channel recovery, otter ecosystem, river management

Abstract: Bearing in mind the Water Framework Directive (WFD60/2000EC) -and with it the need to use a multidisciplinary approach to characterize water courses in terms of hydromorphological, chemical and ecological quality conditions- this study analyses the relations between the recent evolution of channel-floodplain systems and the occurrence of the Eurasian otter, a semi-aquatic top predator which acts as an umbrella and keystone species, of freshwater ecosystems.

Studied rivers, located in southern Italy, suffered strong channel adjustments, especially channel narrowing and incision and related floodplains alterations, from the 1950s up to the 2000s. In contemporary, also Eurasian otter was on the brink of extinction. Instead, for the last 10-15 years a significant trend inversion is occurring: channels recovery has started in various river segments and the otter occurrence has increased.

Otter occurrence is presently increasing only in river segments where channel incision has been less intense and overall channel adjustments allowed the development of new floodplain areas, it is inhibited in segments with scarce to nil channel-floodplain connectivity.

While otter occurrence is dependent upon ecological conditions and processes in floodplain areas, the promotion of channel recovery and channel-floodplain connectivity could surely sustain it, and contribute to improve the rivers hydromorphological conditions in order to better fulfil their environmental functions.

Specific measures, aimed at favoring channel-floodplain continuity and the expansion and natural dynamics of floodplain areas, can be developed in the frame of river management and restoration programs using the acquired knowledge on river conditions, anthropic structures and interventions and related flood risk aspects.

P43 SOCIAL DIFFERENCE AND THE TRANSFORMATION OF PERIPHERALITIES IN TIME OF CRISIS

Organizers: *Kathrin Hörschelmann*, *Judith Miggelbrink*, *Judit Timár*

Location: Room C

SLOT1

Chair: *Judith Miggelbrink*

Schedule: Wednesday, 2 September, 08:30–10:15

NEW GEOGRAPHICAL SPACES, CITIES AND CITIZENS: PUBLIC POLICIES AND BOTTOM-UP STRATEGIES FOR A BETTER QUALITY OF LIFE IN MARGINALIZED SUBURBS. A CASE STUDY FROM GENOA (ITALY)

Author: *Lara Fiorentini**, Municipality of Genoa, Italy

Keywords: Begato 9, bottom-up strategies, Genoa, public policies, suburbs, urban sociology

Abstract: The demand of economic opportunities during the last decades has determined a population decline of rural areas and the concentration of the 80% of European citizens in urban areas. During the seventies many Italian cities have redesigned their own geography, responding to the growing demand for low-cost housing with the construction of new neighborhoods. Among them, the Begato 9 district in Genoa is well known as one of the Italian eye-catching contexts between suburbs affected by social disadvantage and urban degradation. This paper analyzes the transformation of a rural context into an anonymous building complexes, it analyzes also the integration difficulties for the multitude of new residents, the socio-economic and environmental renewal strategies implemented as a response to the previously expressed issues. In particular this paper analyzes the results obtained through several actions whose goal was to give a name, an identity and meaning to the empty places, and the bottom-up processes that have reassembled harmony between people and the urban space they're living in.

The actions coproduced by social workers and inhabitants have redeemed the image of this suburb for the residents who appreciate the new look of the neighborhood where they live and feel it their own, for the mass-media who capture the positive renewal and no longer labeled Begato as a deteriorated place, for the other citizens who have learned to live this place like any other part of the city. This area now is not longer socially marginalized but integrated into the urban fabric.

THE POTENTIAL OF EXPLORING HOUSEHOLD EVERYDAY PRACTICES FOR A GEOGRAPHICAL RESEARCH OF PERIPHERALISATION

Author: *Ilgvars Jansons**, MTA KRTK, Hungary

Keywords: everyday practices, geographical research, household, peripheralization, postsocialism

Abstract: During the last three decades “household” has experienced an increasing importance as a locus of human geography and social science studies. The reasons behind this interest are multi-fold and include: (1) changes in socio-demographic processes, (2) a “cultural turn” in social sciences giving conceptual importance to everyday practices and sites where negotiations between structural factors and agency of actors is taking place and (3) an increasing interest shown in “embeddedness perspective” that offers seeing household as a node in networks of broader social and economic structures. In attempts to map the outcomes of systemic transformation to the daily lives and contribute to wider geographical debates, there has been an increasing number of studies concerned with household everyday practices in post-socialist Central and Eastern Europe. However, this paper argues that these accounts tend to overrepresent economic readings by focusing on the modes of social provision, while paying minor attention to analyses and lessons from other social science disciplines concerned with social, cultural, religious, demographic and other aspects. Therefore by drawing on a close reading of debates on scale and practice-oriented approaches, this paper argues that the analytical potential of household everyday practices for a geographical research in post-socialist Central and Eastern Europe has not been sufficiently explored. The paper concludes by attempting to identify meaningful ways for exploration of household everyday practices as analytical categories in a geographical research on peripheralisation.

FLUIDITY OF THE PERIPHERIES: RESILIENCE AND THE RURAL ASSEMBLAGE

Author: *Márton Lendvai**, Department of Geography and Earth Sciences, Aberystwyth University, United Kingdom

Keywords: assemblage theory, community, periphery, rural areas

Abstract: When investigating how communities reproduce their resilience we cannot underrate the multiplicity and variety of actors and the forms of activities they pursue. In rural Hungary not only have new actors, ways of cooperation and forms of economic activities appeared in the past two decades but in the current turbulent economic environment these remain to be constantly transforming and reshaping both themselves and the communities. This paper discusses such processes on the example of the watermelon producing community of Medgyesegyháza, Hungary where reproduction of a post-socialist condition involves the (re)appearance of a number of post-capitalist and informal economic activities, actors taking advantage of shifting markets and exploitation of migrant seasonal labour. In the dominant discourse many of these “peripheral” phenomena remain neglected by actors of the market, local leadership, agricultural policy and even academic scholarship and so they constitute “the fringe of the periphery”. I argue here however, that deconstructing the binaries of formal and informal, legal and illegal, ethical and unethical, formal and substantive rationalities and also human and non-human may help us consider communities as assemblages. In the assemblage approach any element may have the capacity to jump localities and scales without any overarching coordination and as such kinship, seasonal labour or even the watermelon itself - as non-human actant - may pursue a central territorialising or coding role. The rhizomic form of the community allows even those actors to exert power in certain constellations that would conventionally be considered as the most oppressed and peripheral.

TERRITORIAL MOBILITY AND SOCIO-SPATIAL POLARISATION IN ROMANIA AND HUNGARY

Author: *Aura Moldovan**, Babes-Bolyai University, Cluj-Napoca, Romania

Keywords: circulation, crisis, Hungary, international migration, polarization, Romania, spatial and demographic distribution

Abstract: The present research focuses on the configuration of space in light of core-periphery polarization in post-socialist Eastern Europe, and on the role of territorial mobility during this process. Using the case of Romania and Hungary, the interdependency between the two factors is being explored to show how core-periphery disparities affect migration flows and, at the same time, how the mobility of various social groups contributes to the increase or decrease of socio-economic polarization. Both migration and spatial polarisation are processes which have varied over time, in relation to phases of economic prosperity or crisis. Firstly, the transition from a centralized to a market economy after 1989 has re-widened the gap between centres and peripheries. Because of the general downsizing of industrial employment, masses of people found that they needed to move away from the cities, choosing rural settlements. As the transition period moved on, urban centres started developing again. A great part of the attracted migrants chose to settle in the nearby villages, making suburbs the only settlement category to experience a growing population over the last years in both Romania and Hungary. Then the economic crisis of 2007-2008 hit both countries. With local unemployment rising, external migration became a common solution especially in Romania, which had just joined the European Union in 2007. These phases of economic development and the synchronized major migration patterns can thus be easily connected. The analysis proving this consists of quantitative data, including demographic, economic and social indicators, and a local development index.

INTERCULTURAL STRATEGY OF THE HUNGARIAN ROMA

Author: *Judit Molnar Sansum**, University Of Glasgow, United Kingdom

Keywords: marginalisation, minority issues, Roma issues, segregation

Abstract: Integration of Roma people is crucial for their upward social mobility within European and Hungarian society. This paper discusses current strategies for Roma integration within a new framework devised by the author on the basis of John W. Berry's intercultural strategy model. We attempt to place the current integration strategy of the Hungarian Roma within this model. In the case of this minority group's maintenance of their heritage, culture and identity, theoretically the Roma community could enjoy the benefit of Minority Self Government. However, they lack support (not only financial, but also from a kin state), and face fundamental and pressing problems. Without finding solutions to these, Roma minority activists cannot manage or focus on their cultural heritage issues. In addition to all of the above, current problems in the Hungarian education system impact disproportionately on the Roma. Investigating the relationship between Roma and non-Roma populations in Hungary the outlook becomes even gloomier. All the elements of socio-economic and political life show that Roma face huge disadvantages in Hungary, the gap between the dominant and the Roma group is enormous, and their relationship is far from that which we could call acceptable. The current situation cannot be explained simply by reference to one or two factors, but there is no doubt that discrimination, segregation and exclusion constrict the Roma into a path which leads them to marginalisation, a state of affairs which is not only harmful for the Roma but deleterious to the entire society.

SLOT2

Chair: *Kathrin Hörschelmann*

Schedule: Wednesday, 2 September, 10:45–12:30

CHILDREN, SCHOOL AND EVERYDAY LIFE IN TIMES OF CRISIS IN CATALONIA

Authors: *Anna Ortiz**, Universitat Autònoma de Barcelona, Spain; *Mireia Baylina*; *Maria Prats*

Keywords: Catalogne, crisis, poverty

Abstract: The financial and economic crisis in the countries of Southern Europe affects the daily lives of children and young people in Catalonia. The high unemployment rate diminishes families' purchasing power, becoming more vulnerable and poor, especially those in a disadvantaged situation. Schools are significant places to see important changes: less use of the school canteen, worse diet, more children using lunch boxes, fewer resources for field trips, summer camps or school supplies, cuts in staff and so on. After school activities, such as youth clubs, have less users due to economic constraints. Moreover, as parents become unemployed or move to a more flexible and unstable work pattern, they are more able to accompany children to school, there are new car sharing opportunities and a new distribution of housework and family care may take place. Within this context, social care organizations have fewer resources and increasing demands.

We analyse the interviews taken from social actors and teachers from different size cities and villages in Catalonia in order to evaluate the impact of the crisis on children's daily lives. Information taken from media, specialized reports and literature have echoed this process. We present as well information taken from media and specialized reports that have echoed this process.

YOUNG EDUCATED WOMEN IN FRONT OF CRISIS AND PRECARIOUSNESS: SPACE, EMOTIONS AND STRATEGIES

Authors: *Anna Ortiz**, Universitat Autònoma de Barcelona, Spain; *Maria Rodó-de-Zárate*, Universidade Estadual de Ponta Grossa, Spain

Keywords: Catalogne, economic inequalities, gender, young people

Abstract: By presenting the first results of an investigation that took place in 2015, we aim at examining the perceptions, experiences and everyday strategies in relation to the crisis of a group of young women, students at the Autonomous University of Barcelona. In a context of more than 50% of youth unemployment, with the rising of university fees and declining grants, among others, this research focuses on a group that particularly suffers the consequences of the crisis due to their age and gender. Using data from semi-structured interviews, our approach is based on an emotional perspective to the precarity of their lives. We try to shed light on key issues in the lives of these young women in relation to identity formation, family, work, friendships, the everyday spaces and leisure, care work and the transition phase they live.

ARTICULATING AND RESISTING THE CRISIS THROUGH HOUSING

Author: *Zsuzsanna Pósfai**, MTA KRTK RKI, Hungary

Keywords: debt, housing, Hungary, territorial inequalities,

Abstract: The economic crisis of 2008 made the – already existing – linkages between local housing markets and global capital flows very clear. My aim is to investigate this link in depth in order to understand the geographically highly differentiated effects of the crisis. Based on the theoretical approach of uneven development my argument is that peripheral regions are – due to their dependent integration in the global economy – more vulnerable to crisis. An important sphere for understanding how this vulnerability is translated to a household or individual scale is that of housing. Housing is the main asset of a household and – especially in globally (semi)peripheral regions – can often only be accessed through the assumption of the disproportionately high risk of a predatory mortgage debt. At the same time, individual and collective strategies for solving one's housing situation are also a potentially important sphere of mobilization against global forces of capitalism.

In my paper I will demonstrate through the case of Hungary how A) peripheralization as a result of economic crisis is produced, enforced and manifested in housing markets; B) how housing directly connects households to global economic flows and dependencies (primarily through debt); and C) what possibilities for strategies of resistance can be identified in the domain of housing.

THE RELATIONSHIP BETWEEN SOCIAL EXCLUSION AND ECONOMIC CRISIS

Author: *Gergely Tagai**, MTA KRTK Institute of Regional Studies, Hungary

Keywords: economic crisis, periphery, social exclusion, spatial patterns

Abstract: The process of social exclusion influences social conditions in various – often multiply connected – ways. In the case of social groups endangered by exclusion relations with society, with actors of economic life, with institutions or individuals can be degraded by the effect of numerous factors. Processes leading to exclusion are essentially influenced by the attributes and operation of social or welfare systems and the characteristics of economic structures. Besides, social and economic “shocks” like times of crisis might also have a significant impact on risks of social exclusion. Several aspects of the influence of current economic crisis on social processes can directly be revealed by various changes affecting labour market and social service systems. Nevertheless, many indirect effects on wider social conditions might appear only in a long run, and the course and outcome of these processes is still unclear now.

The paper focuses on presenting spatial patterns of social exclusion in Europe related to various domains of the phenomenon (e.g. earning a living, access to basic services, social environment and political participation) by considering the spatial aspects of peripherality at different geographical scales or rurality. Besides, it has an especial regard to socio-spatial changes of the past years in order to investigate the relationship between changing spatial patterns of exclusion and the potential impact of economic crisis. In addition to the identification of current crisis effects, the paper aims to illustrate what are those vulnerabilities which might be critical factors of social exclusion in a longer run.

SOCIAL VULNERABILITY ASSESMENT USING EXPLORATORY SPATIAL DATA ANALYSIS. CASE STUDY: MURES COUNTY

Author: *Ibolya Torok**, Babes-Bolyai University, Romania

Keywords: Mures County, social vulnerability, spatial data analysis

Abstract: The uneven development of a certain territory, especially the existing disparities between urban centers and rural areas can greatly determine the population's vulnerability in the face of natural hazards. The increasing importance and attention given to natural hazards in numerous papers at national and international level towards the end of the 20th century and the beginning of the 21st century is largely due to the increasing impact of natural phenomena on society as well as the environment, generating at the same time major dysfunctions. Understanding the mechanism and origins of hazardous phenomena and their relation to other factors they influence are indispensable when studying natural hazards and risks, but the socio-economic and environmental dimension of vulnerability which could be influenced by policy interventions and through adequate planning are important as well. The paper examines the social dimension of vulnerability in Mures County using exploratory spatial data analysis in order to determine the presence and location of socially vulnerable groups. The main reason for choosing the mentioned area is given by its agricultural profile and hence the fact that almost all economic activities are related in one way or another to the area's natural resources, often subject to adverse natural conditions induced by natural hazards.

THE CHANGING ROLE OF THE STATE IN THE ORGANIZATION OF PUBLIC EDUCATION (CENTRALISATION, DECENTRALISATION, RECENTRALISATION)

Author: *Gábor Dániel Velkey**, CERS HAS, Hungary

Keywords: marginalisation, public education

Abstract: The centralised organizational and control mechanisms in place during the era of state socialism had been undergoing continuous erosion even before the change of regimes. In the case of public education this erosion took the form of a peculiar innovational anarchy and a growing disregard for compliance with regulation. The 1990s brought a system based on the decentralised provision of services coupled with a centrally set regulatory framework, and this sustained the possibility of diversity in the organization of education on one hand, while a continuous decrease in government engagement and the polarized nature of the distribution of local potential created vast societal and spatial differences on the other. The new regime set out to address the problem with a policy of recentralisation, but its actions merely substituted the previous dependence on spatially varying performance status with an even greater dependence on central planning and also led to the prevalence of political considerations over professional viewpoint due to the weak nature of community control, while failing to address the persistent lack of funding. The presentation aims to reviews the responses available in such an environment addressing the specific margin regions and peripheral areas.

Organizer: *Zoltán Szalai*

Location: Room J

SLOT1

Chair: *Zoltán Szalai*

Schedule: Tuesday, 1 September, 08:30–10:15

SOIL ORGANIC CARBON EROSION AMONG SCALES ON A LOAMIC CAMBISOL

Authors: *Gergely Jakab**, Geographical Institute RCAES HAS, Hungary; *Csaba Centeri*; *Erzsébet Mészáros*; *Boglárka Szabó*; *Judit Szabó*; *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Keywords: carbon redistribution, soil erosion, soil organic carbon

Abstract: Soil organic carbon (SOC) is a key parameter in both terms of soil improvement and climate change mitigation. Soil is a potential sink of atmospheric carbon, but in agricultural lands the carbon content of the soil is limited by tillage and soil erosion. Present case study compares the SOC content and soil organic matter (SOM) compound of the detached soil particles on the ridge to those that are deposited at the bottom of the catena in order to clarify the role of delivery in soil erosion. Initial soil erosion was investigated using a laboratory rainfall simulator while deposition was surveyed and analysed by 3D sampling from drillings on the sedimentary parts. Results highlighted carbon enrichment (50-100%) and C/N ratio increase in each aggregate size class of the detached soil particles. Variations in SOM compounds suggested that a very intensive SOM exchange took place during initial erosion processes and delivery. At the field scale selective SOC deposition were found. Two hotspots were identified as the place of SOC surplus. In these patches SOM compounds were deposited separately due to different geomorphologic positions. The lower patch next to the end of an ephemeral gully was dominated by less polymerized more aromatic SOM, while the upper one was ruled by high molecular weighted aliphatic SOM.

LAND DEGRADATION, SOIL EROSION AND ECOSYSTEM SERVICES

Authors: *Ádám Kertész**, Research Center for Astronomy and Earth Sciences, Hungary; *Melinda Pálincás*, Research Center for Astronomy and Earth Sciences, Hungary; *Adrienn Tóth*, Research Center for Astronomy and Earth Sciences, Hungary

Abstract: Land degradation processes including soil erosion lead to the decline or loss of biodiversity and ecosystem functions. Land degradation processes trigger very serious problems in the third world reducing the possibilities of agricultural use of the land and creating difficulties in food supply. The objective of the paper is to present various effects of land degradation processes on ecosystem services in general and a detailed study on soil erosion, on the example of the natural macro-region of the Transdanubian Hills and of Lake Balaton catchment. Soil erosion decreases the rate and quality of ecosystem services. The paper identifies those ecosystem services which are negatively influenced by soil erosion indicating the different land cover types which provide them. An important effect of soil erosion is its contribution to the eutrophication of lakes. Three catchments representing three different types of Lake Balaton system are presented in this paper. The role of the three catchment types from the aspect of their contribution to eutrophication and their effect on ecosystem services are identified. The main conclusion is that soil erosion processes on hillslopes play a very important role in the sediment supply of rivers and lakes but their negative effect on ecosystem services can be very different according to different environmental conditions. In the case of Lake Balaton the problem of eutrophication risk will be very small because of the construction of Kis Balaton Water Protection System.

ROLE OF GRASS STRIPS AND CONSERVATION AGRICULTURE IN SOIL EROSION CONTROL

Authors: *Balázs Madarász**, Geographical Institute RCAES HAS, Hungary; *Szabolcs Benke*

Keywords: conservation tillage, grass strip, runoff, soil erosion

Abstract: Conservation agriculture is the most effective and modern technology against soil erosion of cultivated areas. However, this technology requires significant financial input. In this study the effect of grass strips on the prevention of soil erosion, as the cheaper and simpler way of soil protection was investigated. Plot size measurements were carried out on a four special plots of 24x50 m size located in SW Hungary in 2014. On the lower part of two plots 3 m wide grass strips were formed. Using tanks connected to the collecting system of the plots, the amount of runoff and sediment, the physical and chemical composition of the samples were measured at each precipitation event. The research occurred on maize culture and both conventional and conservation tillages were involved. Our results suggest that grass strips, as natural filters, could hold back the eroding soil, while the change in the amount of runoff was small. The difference in runoff and sediment budget between the plots with and without grass strips was significant in the conventional tillage (CV). However, in conservation tillage (CS) these differences were small. The soil loss/runoff decreased with 93%/74% at the CV and with 87%/82% at the CS tillage, which means 98%/97% decrease at the CS with grass strip expressed in the percentage of the CV.

SUSPENDED SEDIMENT TRANSPORT IN SERBIAN RIVERS

Authors: *Sanja Enes Mustafić**, University of Belgrade-Faculty of Geography, Serbia; *Tanja Dobrosavljević*; *Jelena Luković*, University of Belgrade, Faculty of Geography, Serbia; *Predrag Manojlović*; *Marko Milosević*

Abstract: Soil erosion as well as sedimentation and transportation processes are complex in Serbia. The processes of erosion are widely distributed and determined by quite favorable natural conditions. Examination of suspended sediment load transport in Serbia is very popular recently. Frequent extreme meteorological and hydrological conditions imply permanent loss of land. In this study, the inter-annual sediment load is examined in the Morava River Basin. Suspended load (Q_s) monitoring was carried out by Met office at 16 profiles. Identified trends were obtained using the nonparametric Mann-Kendall test. Average transport of suspended sediment within the Morava drainage basin is ranged from 15.1 to 160.5 t/km²/year. The results of the Mann-Kendall test showed different trends. Six stations identified a negative trend significant at 0.001, at three stations significance at 0.1, while four stations didn't reveal any significant result. The average negative trend in suspended sediment load is ranged from 0.03 to 7.6 t/km²/year. On the other hand, on three stations a positive trend is identified. The differences can be attributed to the impact of climate change as well as anthropogenic factors. Increasing rainfall trend may have an impact on suspended sediment load on specific stations. On the other hand, extensive years of erosion control measures, as well as the depopulation of rural settlements in some parts of the basin led to reduced intensity of the erosion as well as suspended sediment load transportation.

SLOT2

Chair: *Zoltán Szalai*

Schedule: Tuesday, 1 September, 10:45–12:30

EXAMINATION OF SOIL EROSION PROCESSES AND THEIR RATES BASED ON DATA FROM DIFFERENT LAND USE INTENSITIES

Authors: *Boglárka Szabó*; *Csaba Centeri*; *Gergely Jakab**, Geographical Institute RCAES HAS, Hungary; *Judit Szabó*; *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary

Keywords: dynamics, land use, soil erosion

Abstract: Different land use intensities yield various rate of soil erosion. The rate of soil erosion and the change of this rate over a longer slope can be examined based on certain soil properties. The purpose of this paper is to prove that there are very simple techniques to prove that measurements of basic soil parameters can provide information over soil erosion dynamics on each examined slopes and in between land use types with different land use intensities. For this examination we chose an arable land and a grassland in Gerézdpuszta at the Koppány-valley of Hungary. Both slopes are or were prone to water erosion. We sampled the upper 30 cm soil layer in every 10 meters. It resulted 32-32 point samples on the arable and on the grassland, respectively. We analyzed basic soil physical and chemical parameters. In the present case we wish to publish of our results concerning the chemical soil properties and their interrelations: CaCO₃, pH, AL-P₂O₅, AL-K₂O and SOM. The results proved that soil water erosion dynamics can be proved by these simple parameters as on the one hand they follow the slope topography, on the other hand they behave distinctly under different land use intensities while even on present grasslands there can be signs of former effects of water erosion.

EXTREME SOIL MOISTURE CONTENT AND EROSION

Authors: *Judit Alexandra Szabó**, Eötvös Loránd University, Hungary; *Gergely Jakab*, Geographical Institute RCAES HAS, Hungary

Keywords: rainfall simulator, runoff, soil erosion

Abstract: The inland inundation and drought are potential nature hazards in the agricultural regions of Hungary, year by year. Laboratory-scale rainfall simulator was used to examine the erosion of simulated flooded and droughty soil surfaces to compare the erosion processes and soil loss of the two extreme moisture content situation. Soil loss samples were collected separately per aggregate size fractions and both precipitations were divided three periods to detect the change in the quality and quantity of the soil loss by the time. The aggregate and particle size distribution were measured. In both case, the dominating aggregate fraction of the soil loss was the silt fraction with 70-75% and the micro aggregate fraction with 15-20%. The ratio of the macro aggregate fraction >1mm was negligible. The particle size distribution of the aggregates was mostly similar, but in case of inland inundation the ratio of the fine sand was bigger in the micro- and macro aggregate fractions. The lack of macro aggregate fraction in the sediment is related to the weak soil structure and raindrop erosion. The main difference between the situations can be detected in the direction of the sediment transport. While from the saturated soil surface all water was running down, in case of the drought runoff sank in the soil rifts and transported the sediment to the deeper region of the monolith. The difference in the soil replacement directions could require different erosion protection in the same area in successive years so it very important to study these situations.

LABORATORY EXPERIMENT ON ASSOCIATION OF RARE EARTH OXIDES TO DIFFERENT AGGREGATE SIZES – PRELIMINARY STUDY OF A FIELD SCALE RESEARCH ON SEDIMENT REDISTRIBUTION DUE TO EROSION

Author: *Adrienn Tóth**, Research Center for Astronomy and Earth Sciences, Hungary

Keywords: rare Earth elements, tracers

Abstract: Laboratory and field studies of soil erosion on arable lands have several decades of tradition, our knowledge on the right place of origin of eroded sediment is still limited resulting in gaps in controlling soil loss and its associated nutrient and pollutant transport, as well as in developing appropriate watershed management tools. Quest for spatially distributed erosion data has directed scientific interest to the development of tracing methods. Due to their advantageous characteristics, rare earth elements (REEs) have already been successfully used as multi-sediment tracers, but up to now under field conditions without gaining information on soil redistribution along the studied slope profile.

The primary goal of my research will be to investigate and track sediment redistribution along the slope in field scale, in a multi-year period. Data received from this experiment will help in a good understanding of the tracer redistribution along the tagged slope profile, which could be the key for reducing the uncertainty associated with the conversion of tracer concentrations into erosion rates.

At the beginning of the experiment a very important consideration was the selectivity in REE binding to soil aggregates of different sizes. For this reason REE analysis had to be carried out also on separated samples for different aggregate sizes. The laboratory experiment was carried out after the suggestions by Zhang et al. The present paper shows the results of this preliminary laboratory experiment of the starting field study.

P45 TERRESTRIAL CLIMATE ARCHIVES IN EURASIA

Organizers: *Erzsébet Horváth*, *Farhad Khormali*

Location: Room I

SLOT1

Chair: *Erzsébet Horváth*

Schedule: Tuesday, 1 September, 15:00–16:45

GRANULOMETRIC PROPERTIES OF AEOLIAN DUST DEPOSITS IN THE CARPATHIAN BASIN

Authors: *György Varga**, Research Centre for Astronomy and Earth Sciences (HAS), Hungary; *János Kovács*; *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary; *Gábor Újvári*

Keywords: aeolian dust, loess, pleistocene

Abstract: Granulometric features of aeolian dust deposits are holding important information on past environmental conditions. On one hand, grain size properties are dependent on wind strength, distance(s) from source area(s), dust transportation/depositional processes and post-depositional alterations. On the other hand, the applied methodological approaches have also important effects on grain size distributions (GSDs), and their interpretations. Samples were collected from Hungarian red clay – loess – paleosoil series, which were analysed using a Malvern Mastersizer 3000 laser diffraction particle sizer, a Fritsch Analysette 22 Microtec and a Horiba Partica La-950 v2 instrument to investigate possible effects of the used laser sources with different wavelengths. Various optical settings of the instruments were employed to analyse the effects of applied refractive and absorption indices on the finer particle fractions. The GSD curves of most of the investigated aeolian sediments were polymodal, illustrate various transport and depositional processes, and can be interpreted as sedimentary mixtures. Grain size populations can be partitioned from each other using different mathematic techniques, like parametric curve-fitting and end-member modelling. The GSDs of loess and paleosoil samples could be easily distinguished from each other, while differences towards the older deposits are continually decreasing, indicating smaller amplitude variations in the climatic and depositional systems and/or more intense post-depositional alterations of glacial deposits. Support of the Hungarian Research Fund OTKA under contracts PD108708 (for G. Varga) and PD108639 (for G. Újvári) are gratefully acknowledged. It was additionally supported (for G. Varga) by the Bolyai János Research Scholarship of the Hungarian Academy of Sciences.

PALEOSOLS OF THE HUNGARIAN LOESSES

Authors: *Erzsébet Horváth**, Eötvös Loránd University, Dept. of Physical Geography, Hungary; *Gabriella Barta*, Eötvös Loránd University Faculty of Science, Department of Physical Geography, Hungary; *Balázs Bradák*; *Ágnes Novothny*, Eötvös Loránd University, Hungary

Keywords: aeolian dust, aeolian loess, climate change, loess, opt dating, pleistocene

Abstract: Hungary is situated in the middle of the European Loess Belt characterized with thick loess, which covers almost 1/3 of its territory. The loess formed during the colder and dryer periods of the Quaternary, while during the warmer and more humid interglacials and interstadials the soil formation took place. As a result of the alteration of these periods huge loess paleosol series formed and preserved the traces of the environmental changes. The analysis of paleosol horizons is very useful for the environment reconstructions, because various soil types developed under different conditions. However the diagnostic horizons of these later

buried soils are barely recognizable, due to the post pedogenetic processes such as leaching, precipitation and accumulation of various materials.

We described and sampled several loess paleosol sequences of Hungary (Cérna-valley, Süttő, Verőce) in order to depict the history of the development of the loess series and then to make correlation among the different profiles. In order to discover the alterations and thus to discover and understand the environmental processes we investigated the loess outcrops in different scale (macro-, mezo- and microscale), using chemical analyses, thin sections, the Harden-test, granulometry and chronometric age determinations as well. Combining these methods it is possible to recognize not only the series of the environmental changes, but also the influences of the local conditions, e.g. geomorphologic position, mass movement etc.

POST-IR IRSL DATING OF MIDDLE – LATE PLEISTOCENE LOESS SEQUENCES FROM HUNGARY

Authors: *Ágnes Novothny**, Eötvös Loránd University, Hungary; *Manfred Frechen*, Leibniz-Institute for Applied Geophysics (LIAG), Geochronology and Isotope Hydrology, Germany; *Erzsébet Horváth*, Eötvös Loránd University, Dept. of Physical Geography, Hungary; *Darrell S. Kaufman*; *William D. McCoy*; *Eric A. Oches*; *Christine Thiel*; *Gábor Újvári*

Keywords: AAR, luminescence dating, tephra

Abstract: Due to the post-infrared infrared stimulated luminescence (post-IR IRSL) protocol the dating limit of the luminescence method has been enlarged. It gives new potential to date the older parts of the loess-paleosol records from Hungary. Post-IR IRSL measurements have started at the Basaharc loess section and at the Gödöllő Hills, where Middle and Late Pleistocene loess deposits are intercalated by tephra layers. Besides, the scope of our study is extended in the direction of SW, to the Transdanubian Hills, where the loess profile of Beremend is investigated. Post-IR IRSL test measurements (after Buylaert, et al, 2009 and Thiel et al, 2011) were carried out on polymineral fine grained samples using the pIRIR-290 signal. Dose recovery, fading and bleachability tests were conducted. Fading corrections (after Huntley and Lamothe, 2001) were applied in case of necessity. The post-IR IRSL measurements yielded promising results and indicated that this method is suitable to date sediments up to 350 ka in Hungary. At some profiles amino acid racemization (AAR) measurements are carried out on mollusc shells to provide independent age control for the post-IR IRSL dates.

STABLE CARBON AND OXYGEN ISOTOPE PATTERNS OF SECONDARY CARBONATES AND THEIR PALEOENVIRONMENTAL ROLE – CASE STUDIES FROM HUNGARY

Authors: *Gabriella Barta**, Eötvös Loránd University Faculty of Science, Department of Physical Geography, Hungary; *Balázs Bradák*; *Manfred Frechen*, Leibniz-Institute for Applied Geophysics (LIAG), Geochronology and Isotope Hydrology, Germany; *Erzsébet Horváth*, Eötvös Loránd University, Dept. of Physical Geography, Hungary; *P. Koeniger*

Keywords: paleoenvironment, paleosol, secondary carbonate, stable isotope

Abstract: The origin of secondary carbonates is connected to pedogenic processes on the one hand and on the other hand to the redistribution of the primary carbonate content of the loess-paleosol series (concerning the flow of bicarbonate solutions and biomineralization). Their presence indicates paleoenvironmental changes during glacial-interglacial cycles. Different morphotypes refer to the aridity of the environment or provide informations on humidity - thus determining the depth of leaching. Amount and distribution give hints on the velocity of sedimentation. Stable carbon and oxygen isotope composition of secondary carbonates refer to paleovegetation and paleoprecipitation.

Case studies were made on the outcrops of Süttő, Paks, Villánykövesd and Verőce. The used method was high resolution sampling in order to separate secondary carbonates from bulk samples and to carry out micromorphological analysis. Research was complemented by stable isotope analysis.

The main aim of the presentation is to compare the stable oxygen and carbon isotope patterns of the separated secondary carbonates. Connected with the morphological investigations informations can be gained not just about the paleoenvironment but about microclimatic/microtopographic changes as well.

SLOT2

Chair: *Tímea Kiss*

Schedule: Tuesday, 1 September, 17:15–19:00

FLOODPLAIN LEVELS AND PALEO-CHANNELS: FLOODPLAIN DEVELOPMENT ALONG THE LOWER TISZA RIVER

Authors: *Tímea Kiss**, University of Szeged, Hungary; *Péter Hernesz*, University of Szeged, Hungary; *György Sipos*, University of Szeged, Hungary

Keywords: climate change, landscapes, pleistocene

Abstract: The present study aimed to classify the paleo-channels based on their morphometry, to determine their bankfull discharge, to measure their OSL age, and to identify the floodplain levels based on their height. Three phases of floodplain formation and two phases of incision were defined. However, significant time-span was found between the southern and northern parts of the region. The highest (C) morphological level was active from the beginning of the Late Pleniglacial (25.6 ± 1.4 ka) in the southern part of the study area, thought in the middle and northern part of the study area the C-level was formed later ($20.1 \pm 2.4 - 13.2 \pm 0.9$ ka). At this time the Tisza had 4-5 times greater bankfull discharge ($Q_{bf}=8615$ m³/s). The first major incision started

in the Săgyár-Lascaux interstadial (16.4 ± 1.3 ka) around the Danube and Tisza confluence, but the incision reached the present-day confluence of the Maros River (ca. 175 km upstream) during the Late Glacial (13.1 ± 1.2 ka). There is no great difference between the size of the paleo-channels on the C and B levels, so the incision was probably induced by tectonic activity. The formation of the B floodplain level was quite rapid ca. 13 ka ago. During the last, but strongest incision phase (in south: 13.4 ± 0.7 ka; north: 10.8 ± 0.7 ka) the Tisza had smaller discharge ($Q_{mk} = 3306 \text{ m}^3/\text{s}$), however the downstream divergence of the floodplain levels and the avulsions on the active floodplain (Level A) support the importance of the tectonic movements on the floodplain development. On the lowest, active A floodplain level $3,2 \pm 1,1 - 1,1 \pm 0,7$ ka old meanders remained.

DEVELOPMENT OF THE BEREG PLAIN (HUNGARY) BASED ON RADIOCARBON AND OSL DATA

Authors: *Péter Hernesz**, University of Szeged, Hungary; *Tímea Kiss*, University of Szeged, Hungary; *Róbert Vass*

Keywords: accumulation, fluvial development, incision, osl dating, radiocarbon dating

Abstract: The channel dynamics and flow direction of rivers is primarily influenced by the active subsidence or uplift of a region, whilst the climate and vegetational changes influence the sediment and water regime, thus the channel pattern. Though the river system of the Hungarian Great Plain has been forming since the Late Miocene, the Tisza River appeared in the northeast corner of the Great Plain relatively lately, when the subsidence of the Bereg Plain became pronounced. The exact time of the avulsion is not known, there are evidences on ca. 20 ka (Borsy et al. 1989), but the latest researches date the avulsion at ca. 14 ka ago (Nádor et al. 2007, 2011), but these data derived from regions far from the location of the avulsion.

The Bereg Plain in the northeastern corner of the Great Hungarian Plain is located just 50 km from the Huszt Gate, where the Tisza exits from the mountains, thus the region could be a key in the reconstruction of its paleo-hydrology. Our aim is to date the avulsion and to reveal the main features of the Late Pleistocene and Holocene fluvial development. During the study the walls of mines were studied in detail. To date the time of fluvial activity OSL and radiocarbon dating were applied, while the abandonment of some channel fragments was dated by pollen analysis.

According to our data the region was mainly a marshland where the accumulation was limited. However the rivers had confined flow directions, along which high, but narrow and convex accumulative zones developed due to the intensive overbank sedimentation. The appearance of the Tisza probably dates back to 13 ka.

AEOLIAN FORMS AND MOVEMENT PHASES OF THE SAND DUNE ASSOCIATION IN INNER SOMOGY, HUNGARY

Authors: *Katalin Györgyövícs**, University of Szeged, Hungary; *Orsolya Katona*; *Tímea Kiss*, University of Szeged, Hungary; *György Sipos*, University of Szeged, Hungary

Keywords: aeolian sand, dune morphometry, GPR, osl dating, Somogy

Abstract: The aeolian forms preserve the main environmental characteristics of the environment prevailed during their formation. The aim of the study is to identify the aeolian forms of East Inner Somogy, classify them, analyse their spatial distribution, determine the age of sand movement by OSL dating and analyse the internal structure of some dune types studying GPR profiles. Altogether 4404 positive and 2911 negative forms were identified in the study area. The forms were classified based on their morphometric parameters, while the positive forms were also grouped based on their position relatively to each other.

The grain size distribution results show that the material of simple forms becomes finer southward, in accordance with the structure of the alluvial fan and prevailing wind direction. However this does not apply for dunes located on each other. The grain size is inversely proportional to the size of a dune and its age, thus younger and smaller dunes have coarser and less well sorted material.

For dating, 22 OSL samples were measured which reveal that large parabolic dunes formed in the LGM (17-21 ka ago), while medium parabolic dunes developed during the Dryas Stadials (13-15 ka ago). A minor aeolian period was dated in the Boreal Phase (8 ka ago). Presumably due to anthropogenic activity hummocks formed during the Subboreal Phase (2-3 ka ago) and in the 17th-18th century (0.2-0.3 ka ago). The GPR profiles also imply several movement phases and show detailed layers of sands.

P46 TERRITORIAL DEVELOPMENT IN EUROPE: INNOVATION AND LOCAL GOVERNANCE IN RURAL DEVELOPMENT PROGRAMMES

Organizers: *Marilena Labianca*, *Francisco Antonio Navarro*

Location: Room G

SLOT1 LEADER IMPLEMENTATION, EVALUATION AND GOVERNANCE. STUDY CASES OF LOCAL ACTION GROUPS AND TERRITORIES IN EASTERN AND SOUTHERN EUROPE

Chair: *Marilena Labianca* Discussants: *Anna Maria Augustyn*, *Thomas Dax*, *Elena Irincu*, *Francisco Antonio Navarro*, *Jan Prochazka*

Schedule: Tuesday, 1 September, 17:15–19:00

LOCAL RESPONSES TO THE EU RURAL DEVELOPMENT POLICY

Authors: *Anna Maria Augustyn**, Consultant, vice-president at Groupe de Bruges, Poland; *Gusztáv Nemes*, HAS, Hungary

Keywords: leader, rural development, rural development policy, territorial governance

Abstract: In the last two decades the rural development policy emerged as a separate pillar within the EU Common Agricultural Policy that was challenged by new delivery tools. Among them, the LEADER approach became an important mode for promoting a brand new vision of territorial governance: a bottom-up strategy development beyond sectoral divides. Significant funding was also channelled downwards to make it working. This was hoped to be a manifestation of neo-endogenous rural development. In our paper we look at the promises of this policy design (central policy subsystem) and local responses (local heuristic system). We examine the rhetoric and implementation of the EU legislation and domestic level Rural Development Programmes with focus on LEADER. As well, we confront them with the practical realisation of territorial development at the local level. In other words: we contrast rural development policy with rural development which is broader in scope. Some projects examples from Hungary will be here used to illustrate the challenges that local communities encountered within the existing policy framework. They point to an integrated character of the two subsystems. However, it is fully realised only under specific circumstances, such as capacities of actors, social learning, culture of dialogue and trust, or functioning good and multi-level governance. We conclude with some ideas to improve the existing state of rural development policy delivery.

RURAL INNOVATION ACTIVITIES AS A MEANS FOR CHANGING DEVELOPMENT PERSPECTIVES. AN ASSESSMENT OF PROMOTING LEADER INITIATIVES SINCE MORE THAN TWO DECADES

Authors: *Thomas Dax**, Federal Institute for Less-Favoured and Mountainous Areas (BABF), Austria; *Theresia Oedl-Wieser*

Keywords: evaluation, leader, local development, participation, social innovation

Abstract: In the European Union rural policy has evolved since the late 1980s and is now predominantly recognized through specific regional or national Rural Development Programmes. The need for addressing social changes and innovative responses has been largely taken up in activities of the LEADER programmes and scattered other local development action in rural regions. While the discourse on the concept, contents and policy approach and implementation of rural development elaborated gradually, LEADER was conceived from the beginning as a bottom-up, innovative exploratory programme aiming at capacity development and enhancing participation in rural regions.

The paper will build on the account of the evolution of rural policy (Dax 2014) and a critique on the failures of LEADER implementation over the previous programme period (Dax et al. 2013) which were largely due to administrative constraints and lack of strategic orientation. However, the debate on rural policy has significantly evolved, not least because of the LEADER innovative framework and good practice, and has affected cross-sectoral debates (cf. OECD 2014 and Copus and de Lima 2014).

The long term assessment of the paper will be based on analytical work (cf. above references) of RDP design, implementation and evaluation in two EU-projects (RuDI and EDORA) and LEADER evaluation (for all periods so far). Findings on further targeted analysis will provide insights to which extent local empowerment and innovation have resulted in regional effects.

LEADER APPROACH AS LOCAL DEVELOPMENT TOOL IN ROMANIA. REFLEXION FROM THE CASE OF BIHOR COUNTY

Authors: *Elena Irincu**, Universitatea din Oradea, Romania; *Ciprian Barna*; *Rodica Petrea*; *Luminița Filimon*; *Claudiu Filimon*

Keywords: leader, local development, rural development, spatial planning

Abstract: For more than 20 years the LEADER programme has been playing a major role in boosting local development in Europe, due to its ability to address territorial development issues, through new forms of partnerships and correlated activities. By placing the local development status of Romania in the European context, this study aims to highlight the role that the LEADER programme plays in stimulating local development. Research methodology is based on the analysis of the development and implementation of territorial development strategies within the LAGs in Bihor County for the 2007-2013 programming period. One of the major conclusions drawn from the analysis made is that, although community involvement in local development in Romania is still incipient, the LEADER programme can be a real catalyst for sustainable territorial development.

THE LEADER APPROACH IN PUGLIA: CRITICAL ISSUES AND POTENTIALITIES STARTING BY EMPIRICAL EVIDENCE

Authors: *Marilena Labianca**, Università del Salento, Italy; *Angelo Belliggiano*, Università degli Studi del Molise; *Stefano De Rubertis*, University of Salento, Italia; *Angelo Salento*

Keywords: governance, leader, rural development, social innovation, Southern Italy

Abstract: In recent years, the role played by the public sector is emerging more and more as a coordinating role of networks in the multi-level perspective, combining innovation and competitiveness with sustainable development and the quality of people's lives. This is particularly true for agricultural sector, a sector which in recent years has been characterized by a deep change in the models of governance and government. Specifically what characterizes the most recent developments in agricultural policy is the inclusiveness of decision-making, this determines a shift from structures of government to governance processes (Società Geografica Italiana, 2012). However this change, especially at the local levels, does not seem to be so quick and radical. In particular the last planning cycle of European policy for rural development (2007-2013) showed several contradictions as the strong hierarchy of the pro-

gramming process. For the 2007-2013 programming cycle, and based on the community and national strategic guidelines, Apulia region has developed the Rural Development Programme, an implementation instrument of the rural development strategy, which prefers to act primarily on axes 3 and 4, and then choosing to invest on local development and the Leader approach. But this confidence in the Leader approach, paradoxically not guaranteed to the Apulian LAGs to operate independently neither produced significant innovations and changes in the models of local governance. This study, based on previous and ongoing research, aims to focus on the problems, opportunities and the impacts on the territories of the programming cycle just ended.

LEADER APPROACH IN THE CZECH REPUBLIC: THE ADDED VALUE ON REGIONAL LEVEL IN MULTI-LEVEL GOVERNANCE SETTING

Author: *Jan Prochazka**, Masaryk University, Czech Republic

Keywords: community-led local development, local governance, rural development

Abstract: Local Action Groups (LAG) become important local actors in the rural development during the EU's last programming period 2007-2013. They cover large part of Czech countryside and bring new method of local development into the rural areas. However, the question remains: whether this method brings an added value to the development of rural regions? This question is answered by analysis of financial support distributed through national and LAG level. Consequently few LAG from Moravia are selected and their contribution to rural development is evaluated in case studies. Firstly, how do they overcome the Czech unique framework of small municipalities? Secondly, is Leader approach used as the method of local development or rather like financial instrument? This study provide additional perspective on Leader approach and investigate what kind of added value can be found in the project selected on local level by LAG. Lastly, this paper answer, how are the identified inadequacies from the last programming period reflexed in current rural development policy.

INNOVATION AND RURAL CHANGE IN DEVELOPMENT PROGRAMMES. THE CASES OF THE LOCAL ACTION GROUPS OF WALES AND ANDALUSIA

Authors: *Francisco Antonio Navarro**, Universidad de Granada, Spain; *Eugenio Cejudo*; *Juan Carlos Maroto*

Keywords: leader, local governance, rural development, rural development plan

Abstract: The main purpose of this article is a first approximation to the effect that Rural Development Programmes (RDPs) have had on Rural Change (RC). The role played principally by the LEADER Initiative, to rise the new rurality, and its incidence in the emergence of these new characteristics in the rural territories of the European Union. Despite these RDPs aren't able to generate significant changes, especially because of their limited availability of funds, this doesn't mean that it isn't need of an investigation about their effects.

The study areas selected, have been rural territories of Wales and Andalucia, where RDPs have been implemented. It has been considered the opinion of the managers and staff of every Local Action Group in both regions.

Our findings suggest that RDPs have contributed in "a quite way" to the RC, principally in qualitative and demonstrative effects, and specially in andalusian rural areas, because their initial situation were more problematic (more dependent on agriculture, high unemployment, lack of local decision-making and social articulation, etc.).

SLOT2 RURAL TOURISM AND RURAL DEVELOPMENT, AGRICULTURAL LANDSCAPE, TERRITORIAL INEQUALITIES. IMPACTS OF THE COMMON AGRICULTURAL POLICY

Chairs: *Peter Jordan*, *Zanda Peneze* Discussants: *Nicola Galluzzo*, *Csilla Nezdei*, *Antonina Plutino*

Schedule: Wednesday, 2 September, 08:30–10:15

THE LOCAL DEVELOPMENT PLAN GAL "THE PATHS OF THE GOOD LIFE"

Author: *Antonina Plutino**, Università di Salerno, Italy

Keywords: development integrated, sustainable land use

Abstract: The central theme of the LDP is to develop integrated and sustainable land Antica Volcei Alburni by strengthening local networks, diversifying and qualifying the attractiveness of the area. The territory has a budget of microattrattori that make it unique in the regional co-exist in the same geographical area the spa center of Contursi Terme, natural Alburni, ancient archaeological Volcei, those exhibiting a degree of activation rather significant. However, it remains a marginal level of integration that these strengths have established with the territory in which they are located, remaining local supply, in terms of products and services, agri-food and agri-environment, not fully activated. It is increasing the quality of food products, the landscape, the organization of the business fabric, essential elements for the promotion of the entire target area, both the functional consolidation of tourism as existing and especially their integration. The quest for excellence will be pursued through projects that integrate the routes within the territorial matrix production and artisan food and wine. Trails that wind along the vestiges of the past, the hot springs and mountain landscapes, creating paths of Wellness of soul and body, which are connected with roads enogastronomy arts and crafts rooms. The paths are configured as open paths that each traveler can close tourism options including environmental, cultural, spa, food and wine, art and crafts.

TOURISM AS A DRIVING FORCE IN RURAL DEVELOPMENT? RESULTS OF A COMPARISON OF CASE STUDIES IN ROMANIA AND AUSTRIA

Authors: *Peter Jordan**, Austrian Academy of Sciences, Institute of Urban and Regional Research, Austria; *Xenia Kinga Havadi Nagy*, Faculty for Geography, Babes-Bolyai University, Romania; *Zoltan Marosi*

Keywords: local governance, rural development, ruralspace, tourism

Abstract: In the framework of a bilateral Romanian-Austrian project on new and innovative initiatives in rural development, a mixed Romanian-Austrian research team has investigated three villages both in Romania and Austria selected under the aspect of recent innovative developments by interviews with stakeholders and representatives of the local administration, focus-group discussions as well as by participating observation. The paper will present first results related to the role of tourism in rural development in a comparative way under the following main aspects: (1) touristic potential in the sense of (used or unused) opportunities on the background of current touristic demand (including main tourism trends); (2) current touristic offer; (3) perspectives of further (touristic and extra-touristic) development. The results will reveal rather different situations and divergent roles of tourism. It becomes, e.g., obvious that the benefits of tourism do rarely affect the whole population to the same extent, that tourism is sometimes just a business between non-locals, that first successes in tourism make local stakeholders and administrations neglect other opportunities and underestimate the volatile character of this business. It is, however, also confirmed that tourism is a main driving force in rural development and sometimes the only real opportunity.

THE SPATIAL CHARACTERISTICS OF HERBS IN LAKE BALATON RECREATIONAL AREA

Author: *Csilla Nezdei**, University of Pécs, Faculty of Sciences, Doctoral School of Earth Sciences, Hungary

Keywords: herbs, Lake Balaton recreataional area, land use

Abstract: In the proposed study the author examined the spatial characteristics and patterns of the herb-growing areas in the Lake Balaton Recreational Area.

Nowadays as so many people suffer from various diseases, there is an increase of the dietary supplement products, cosmetics, teas, etc. containing herbal active ingredients. Thus more and more of these products is available on the market in Europe and Hungary as well. The favourable natural conditions of Hungary would allow a significant production of herbs for the herbal-sector. Examining the current market situation motivated the author to carry out this research.

As a part of the agriculture, the production of herbs can influence the land use positively (erosion of soils is not so strong compared to common field crops), and because of the production's labour demand, the sector could ensure job facilities for locals (like Homokszentgyörgy, Székkutas, Balatonőszöd, etc.).

This topic is especially interesting to study regarding the fact that this is the second largest touristic region of Hungary, where developing health tourism and cultivating fallow lands also has an important role in regional developments and forming of its unified image.

The Strategic Program 2014-2020 – made by the Balaton Integration Non-profit Company – also formulated as a goal the production and processing of herbs. These investments can give new perspectives for the region. This also shows the actuality of the topic.

The current study describes the present situation and the future opportunities by revealing the historical background of similar activities.

THE INFLUENCE OF EU PAYMENTS ON LAND USE IN UPLAND MOSAIC-TYPE LANDSCAPE OF LATVIA

Authors: *Zanda Peneze**, University of Latvia, Faculty of Geography and Earth Sciences, Latvia; *Imants Krūze*; *Olģerts Nikodemus*

Keywords: agricultural land-use, EU support payments, Latvia, marginal areas, rural landscape

Abstract: Landscapes are influenced by many factors, including political resolutions concerning agriculture. Since 2004 agricultural land-use in Latvia has been essentially influenced by common EU agricultural policy and payment programmes aimed at preservation of agricultural land and reduction of landscape marginalisation.

The goal of the research was to clarify how EU support payments have influenced agricultural land-use in the mosaic-type landscapes in the uplands of Latvia. As the object of the research one of the Vidzeme Upland marginal areas was chosen. Since 2004 this region has experienced abandonment of agricultural land. In the research we used data obtained from the Rural Support Centre of Latvia about farmers' applications for Single Area Payments(SAP) and Less Favourable Area Payments(LFAP). We also carried out field trips to map agricultural land-use and clarify the present situation of land-use. The obtained data have been processed, analysed by GIS software ESRI (ArcView-ArcMap).

Our research showed that since 2004 till nowadays the number of applicants for SAP and LFPA had considerably grown. There is a tendency for farmers to apply more for SAP than for LFAP. This tendency became especially notable in 2008 when the new regulations for receiving LFAP established, that applicants should own a herd of cattle, so that agricultural support payments were used for agricultural production. It is worthy of note that there are fewer applications for LFAP than for SAP. It testifies to the fact that support payments are more used for the maintenance of the landscape than for agriculture production.

ANALYSIS OF FINANCIAL SUBSIDIES ALLOCATED BY THE COMMON AGRICULTURAL POLICY IN THE EUROPEAN FARMS IN ORDER TO REDUCE TERRITORIAL INEQUALITIES

Author: *Nicola Galluzzo**, Italy

Keywords: economic inequalities, FADN, multifunctionality, rural development plan

Abstract: As a consequence of the enlargement of the European Union in 2004 there has been a reshaping of funds allocated by the European Union both in favor of the endogenous rural development, part of the second pillar of the Common Agricultural Policy (CAP), and also in terms of direct payments towards ag-commodities in the first pillar of the CAP. The European Commission, in order to evaluate impact, role and function of the Common Agricultural Policy, has set up an annual survey in a sample of European farms belonging to the Farm Accountancy Data Network (FADN). By using this dataset over nine year time 2004-2012 in 25 countries of the EU, we have assessed in a quantitative approach if funds allocated by the first and second pillar of the CAP have reduced economic disparities in European countries and in European farms. In order to investigate economic disparities we have used some index of concentration, such as the Gini Index, the poverty index elaborated in 1976 by Amartya Sen and entropy index. Furthermore, with a multiple regression model we have investigated the most significant interactions between the financial supports disbursed by the Common Agricultural Policy in reducing the territorial and agrarian disparities and in arising the farm income level as well. The analysis of FADN dataset has pointed out as there has been a reduction of inequality distribution in European farms especially as regards the financial subsidies allocated to implement the rural development compared to those paid in the first pillar of the CAP.

P47 TERRITORIAL IMBALANCES, GEOPOLITICAL TRANSFORMATIONS AND MACROECONOMIC ENLARGEMENT PROCESSES IN THE CHANGING SCENARIO OF EU

Organizers: *Giacomo Cavuta, Dante Di Matteo*

Location: Room E

SLOT1

Chair: *Giacomo Cavuta* Discussant: *Dante Di Matteo*

Schedule: Wednesday, 2 September, 15:00–16:45

THE ENLARGEMENT OF THE EU AS A LOCAL CASE OF GLOBALISATION: A THEORETICAL APPROACH

Author: *Gianfranco Battisti**, University of Trieste, Italy

Keywords: enlargement, Europe, geopolitic, globalization, spatial structure, world order

Abstract: The European state-building is a stimulating case-study, useful to investigate a variety of political and economic processes. According to our categorisation (Battisti, 2011) we define the EU as a regional variant of globalisation. It is a clustering involving a group of nations geographically located which is developing along lines similar to those active at a planetary level. Moreover, the European merger is deeply embedded in the wider process of worldwide globalisation, so that the future geopolitical entity will not be independent of the world-system (Varoufakis, 2011).

In this frame, any territorial inclusion triggers a set of creative destructions, similar in their nature to those produced by the development of capitalism. From a geographical perspective we point out the remodulation of territorial spaces and relationships (Battisti, 2002), while from the economic side a reorganisation of economic structures is to be stressed. For the former case we can quote the reunification of Germany or, for a history in progress, present-day Ukraine. For the latter, a striking example is the restructuring of the Greek economy.

References: G. Battisti, "The logic of empire. Old and new concepts in the European geopolitical reconstruction", in: L. BUZZETTI, E. BULLADO (eds.), *Geographical renaissance at the dawn of the millennium. The Italian perspective*, Roma, Società Geografica Italiana, 2002, pp. 99-114.

G. Battisti, "Globalization reshaping regionalization", *Proceedings of the 2nd Conference on the Adriatic Forum, Construction and Deconstruction of Nationalism and Regionalism. The Long Journey to Europe*, Montpellier, Académie Européenne de Géopolitique, 2011, pp. 17-22.

Y. Varoufakis, *The Global Minotaur: America, the True Origins of the Financial Crisis and the Future of the World Economy*, London, Zed Books, 2011.

THE CASE OF MATERA, BASILICATA, SOUTHERN ITALY: A MODEL OF REUSE, SUSTAINABILITY AND RESILIENCE FOR EUROPE

Authors: *Marcello Bernardo*, Department of Languages and Educational Sciences, University of Calabria, Cosenza, Italy; *Francesco De Pascale**, University of Calabria, Department of Languages and Educational Sciences, Italy; *Alessandro Ruffolo*

Keywords: Basilicata, matera, resilience, Sassi, sustainability

Abstract: Europe is facing a severe crisis: old certainties are crumbling and traditional ways of working are showing signs of profound weakness. The first challenge, perhaps the most important, is to manage an advanced economy to generate not only economic value, but also social justice and environmental quality. The second major issue is to promote the adoption by civil society and institutions of an “ethos” within which citizens could plan, produce and co-create their cities, cultivating a new and more rich democratic awareness. Thirdly, it is about creating a climate of openness that enhances creative problem solving and provide a platform to think, plan and act together, with courage. Matera has what it takes to meet these challenges. Matera’s story is told from its streets, its buildings, its monuments. They tell a story of ingenuity and resilience, disgrace and redemption, tinged by a deep sense of shame. The characters in this story are “Sassi”, which for over thirty years were left to decay, was a synonym of “national shame” and was the emblem of a southern backwater, in conflict with modernity. The awareness of its inhabitants of their age-old tradition, based on the ability to inhabit inhospitable places, to create a harmonious relationship with territory, has prompted many young people to return to inhabit eresil “Sassi” and to make them become “World Heritage Site” in 1993. Twenty years later, grandchildren of those brave young people have proposed to community a new victorious challenge: help to make Matera 2019 European Capital of Culture.

EUROPE’S BANKING UNION AS A CRUCIAL MOMENT OF STRUCTURAL CHANGE IN ECONOMIC POLICY

Author: *Simona Epasto**, University of Macerata - Department of Political Science, Communication and International Relations, Italy

Keywords: critical political economy, economic inequalities, economy, EU policies, Europe, financial crisis, reforms

Abstract: The crisis of sovereign debt in the Eurozone and the contagion to banks made it necessary to accelerate the process of economic and financial unification of the Area. During the crisis, it was realized that a critical piece was missing in the European construction and in the architecture of stability in the Region; in fact, the system preceding 2008, was revealed incapable of responding to the systemic nature of the crisis. The repeated bailouts of the banks have created situations of profound injustice, inequality, increase of public debt as well as a heavy burden for taxpayers, weakening, above all, the sense of belonging to the EU. For these reasons, since June 2012 there has been more active commitment to the creation of a Banking Union. The aim of this paper is to explore the path that led to the Banking Union as an ambitious integration project, an important result but in many ways imperfect; if it represents a part of a global political response, which certainly offers scope for improvement, it’s susceptible to strong objections and legal concerns. As a complex but necessary process, the Banking Union should strengthen the institutional framework of the Eurozone and represent a step forward towards a real political union that goes beyond the mere objectives of economic convergence and mitigates the growing regional disparities of the Area.

OPPORTUNITIES AND THREATS DUE TO EU ENLARGEMENT

Author: *Andrea Gozzi**, Italy

Keywords: community, economy, enlargement, transactions

Abstract: The EU enlargement requires careful analysis by market operators about opportunity and threats.

The most important opportunities for the companies are: the possibility to expand the marketplace where delocalizing the production to reduce costs and the possibility to reach a new and large demand to profitably allocate different products. The most dynamic and flexible European businesses have been able to deal with the threat of a harder competition through a marketing approach. It consists in better strategic planning, innovation, efficiency and cooperation. In the last fifteen years the flow of goods, services, people and capitals within the single market have greatly increased due to the improving economic conditions in the eastern countries. In the EU there is still the need to harmonize community regulations, trade and fiscal policies and taxation on profit to avoid unjustified penalties in a free market competition. Italy, with the highest taxation on companies in the EU, is in a position of competitive disadvantage, not being able to attract foreign investors and seeing more and more businesses relocate their headquarters and production facilities in neighboring eastern countries. Veneto is a heavily exporter region that produces 14% of Italian exports to EU countries. This is due mainly to the presence of many flexible, reactive and collaborative small medium sized companies and for the geographical location of the region. Europe therefore needs a greater economic and political integration and structural reforms to overcome the current economic stagnation and achieve a greater level of trade, employment and prosperity.

UKRAINIAN CRISIS BETWEEN TERRITORIAL DYNAMICS AND STRATEGIES OF ENERGETIC SUPPLY

Author: *Michele Pigliucci**, Università di Roma "Tor Vergata", Italy

Keywords: cold war science policy, Europe, geopolitic, Russia, Ukraine

Abstract: The political tensions that shaken Ukrainian Republic in the last years, were the prelude of a large military dispute that is going to threaten European stability. Despite having large interests in the area, European Union is now unable to take charge of the situation due to the lack of a common energetic policy. Consequently, Member States are forced to set bilateral agreements

with natural resources exporting countries, and this represents the main weak spot of communitarian governance. In particular, the issue of natural gas supplies shown off the weakness of policy of European Union; weakness that jeopardizes the power to intervene in the crises that concerns regions strategic for European security. The issue of South Stream is the symbol of that weakness: the building of this pipeline could supply Europe with 63 bcm of Russian gas every year, bypassing Ukrainian hub. But US, taking advantage from different positions of the single States in the issue, convinced EU to set to Gazprom as many conditions to cause the cancellation of the project. Contextually, the increasing availability of US shale gas is provoking a prices nosedive, that aims to cause problems to Russian economy and to force Moscow to relent in the issue of territorial control of Donec basin and of Crimean peninsula: a new strategy similar to Reagan's "arms race" that quickened the collapse of soviet economic system. Russian reaction aims to create a new geopolitical power pole, to take a main role in this new asymmetric, and not just cold, war.

NEW TERRITORIAL STRUCTURE OF THE EU: WHAT ADVANTAGES AND DISADVANTAGES?

Authors: *Dante Di Matteo**, "G. d'Annunzio" University, Italy; *Giacomo Cavuta*, Università G. D'ANNUNZIO Pescara, Italy

Keywords: community, enlargement, geopolitic, transformation

Abstract: In a context just like the today's one it is necessary to give answers to some questions about the future scenarios that lie ahead in the light of the upcoming changes in the territorial structure of the European Union. The east enlargement is the last step of an harmonization process which started several years ago and which will also allow the Balkan countries to join the Community, if the minimum requirements and necessary conditions for membership are respected. At this point, the discussion items are numerous and include all the fundamental sectors of national economies: trade, agriculture, industry, tourism, labor market, social cohesion, environment, research and development, finance; for each of the above mentioned segments there are complexities, advantages and disadvantages that the incoming countries will have to face in order to gain admission into the EU.

The aim of the following paper is to identify those aspects such that each of the six countries has or not convenience to take part of the European Community. Through the construction of a standard model that involves the use of the most important variables to explain the general condition of the country it will be possible to get a first result for each state; subsequently, all these models will be compared with each other, in order to identify what are the Eastern countries that possess the right and favorable conditions for membership. This evaluation will be possible by comparing these results with the average value of the countries already in the EU.

P48 THE CHANGING GEOGRAPHIES OF THE EUROPEAN CITY COMPETITION UNDER THE CONTEMPORARY GLOBALIZATION

Organizers: *Michael Hoyler*, *László Jeney*

Location: Room L

SLOT1

Chair: *László Jeney*

Schedule: Tuesday, 1 September, 17:15–19:00

EXCHANGE INDUSTRY IN TURMOIL: FINANCIAL GLOBALISATION AND THE NEW MAP OF FINANCIAL CENTRES IN EUROPE

Author: *Maria Stella Chiaruttini**, European University Institute, Italy

Keywords: attractiveness of urban settlements, economic space, Europe, globalization, neoliberal capitalism, polarization

Abstract: Over the last decades, the exchange industry has undergone profound changes. Once mutual organisations and often national monopolies, stock exchanges are now transforming into self-listed joint-stock companies controlling large multinational business groups. From being relatively static institutions whose national supremacy was unchallenged, stock exchanges have become highly dynamic enterprises aggressively competing to expand internationally. This epoch-making transformation, characterised by an unprecedented wave of transnational mergers, has been triggered by a massive liberalisation of capital movements and the development of electronic trading with its disruptive potential to constantly reconfigure the geographic maps of finance.

This results in an ideal cleavage between financial centres as location of financial activities and exchanges as enterprises. If in the past financial centres have faced each other bolstered by the might of their respective immovable exchanges, now that the latter have become multinationals, mobile and elusive entities whose target is the global market, they have to compete in order to attract increasingly rootless financial institutions, among which exchanges. If they manage to survive, regional financial centres, like those in Germany, have to struggle to protect their niche markets, increasingly threatened by larger players. Concentration in the exchange industry is disproportionately benefiting these latter, London being a notable example. The City has now become the new ascending hub of international finance, overshadowing even the rise of Paris and Frankfurt. The paper, therefore, discusses the transformation of the exchange industry, focussing in particular on the new geographical agglomerations of financial power and the competition between financial centres in Europe.

CITIES AS COMMAND AND CONTROL CENTRES OF THE GLOBAL ECONOMY: AN EMPIRICAL INDUSTRY-SPECIFIC ANALYSIS

Author: *György Csomós**, Department of Civil Engineering University of Debrecen, Hungary

Major cities of the global economy can be identified on the basis of Friedmann's world city hypothesis on the one hand, and Sassen's global city theory on the other hand. However, there is a significant difference between these two approaches in that the former primarily focuses on the concentration of multinational corporations (MNCs) in world cities, while according to the latter, global cities are the post-industrial focal points of advanced producer service firms and financial services companies. In recent years global city theory has become more widespread, and MNCs in general have lost their significance regarding the designation of leading cities in the global economy. However, a new tendency has started to emerge: While international financial markets have been ruled by some global cities for decades, powerful MNCs have been established in major cities of emerging economies. This has resulted in a heavy competition on developing markets, primarily in Africa, Latin-America, and Asia, between companies of the developed countries and those of the emerging economies. Thus, the global economy witnesses the birth of new command and control centres, and for this reason it is reasonable to return to Friedmann's world city concept.

In this empirical analysis I rank cities on the basis of the financial performance of MNCs that they host. My main aim is to examine the power of cities in different industry sectors and create a new urban hierarchy.

AIR TRANSPORT SHAPING SPACE: MAPPING THE COST DISTANCE AND TIME DISTANCE OF BUDAPEST USING AIR TRAFFIC DATA

Author: *Gábor Dudás**, MTA KRTK RKI ATO, Hungary

Keywords: Budapest, distance, GIS mapping, low-cost airlines, transport

Abstract: From the second half of the 20th century on, the development of transportation and information technologies have had a profound impact on people's mobility, changed the geographical and time constraints of flows of goods and information, intensifying the relationship of cities and making those more complex. Considering this, the research focuses on the different business models of network carriers and low-cost carriers and their space forming and modifying practices. We seek to understand how the proliferation of low-cost carriers is changing Budapest's position and role in Europe by altering its spatial relationship and air accessibility. The mapping of these changes requires the use of alternative distance concepts, because as technology advances, the distance between two points in space is no more determined by physical distance but by the time and cost that cover these distances. Thus the quantification and measurement of the cities' spatial relations requires the use of cost distance and time distance values derived from air traffic data. The aim of the research is to compare and map the cost distance and time distance of cities considering the different business models of the network carriers and low cost carriers. In the study based on quantitative research methods and internet data query we work out a data mining and GIS based mapping method which helps to visualize flows between European cities and Budapest, and reveal the spatial relationship between them.

EFFECTS OF RAPID URBANIZATION ON LAND COVER CHANGE: IN THE CASE OF ISTANBUL

Authors: *Fatih Kara**, Fatih University, Department of Geography, Turkey; *Arif Keceli*, Mehmet Akif Ersoy University, Turkey

Keywords: antropogenic landscape forming, Earth observation, urban changes, urbanization

Abstract: Rapid urban growth is one of the most influential phenomenon of this century. Spatial reflections of this circumstances is an argumentative issue based on its' effects on the environment and society. Population growth, in urban areas, requires more space and investments for principal needs of communities, such as housing, education, health, commerce and industry. Besides them, there supposed to be enough room for secondary sectors, such as service areas, entertainment and recreation places, logistic centers, and transportation utilities. Increase of economic inequalities cause many spatial problems and social conflicts along with population growth. Despite its ancient history, unfortunately, extreme cases of aforementioned problems and social conflicts are being experienced in Istanbul. The city has been changed very dramatically in the last century more than ever. In this huge metropolitan area, there are successful planning and applications in case of urban regeneration, infrastructure renewals, service improvements and spatial developments, as much as very problematic cases. This study is aiming to investigate land cover changes of Istanbul in between 2000 and 2013, due to rapid urbanization. It is also focusing on primary reasons and possible results of this dramatic changes in near future. Spatial technologies are used to determine land cover changes in Istanbul for last decade. Two LANDSAT images acquired and semi-automated methods like deltacue, NDVI, and PCA used. According to results, settlement areas are increased and forest cover is fragmented because of unplanned and/or illegal settlements in Istanbul. Primary data reveals endangered situation of vegetation cover of study area.

LINKED - THE ECONOMICS OF CITY NETWORKS: POLYCENTRICITY, INTEGRATION AND PERFORMANCE

Authors: *Evert J. Meijers**, Delft University of Technology, The Netherlands; *Martijn Burger*; *Marloes Hoogerbrugge*

Keywords: polycentrism, urban planning

Abstract: The competitiveness of cities is increasingly less influenced by local factors. Instead, dynamics within the global urban network often determine the fate and fortune of cities. The embeddedness of a place in all kinds of networks has become a key factor for their competitiveness. However, according to economic theory, the agglomeration benefits of large cities are the key driver of growth. The network perspective suggests that this should be complemented, perhaps substituted with a focus on

network integration. So far, this hypothesis has been mainly explored focusing on inter-firm relationships (substituting localisation economies), and generally on the global scale.

This paper focuses on urbanisation economies and networks between cities that are part of a polycentric metropolitan area. The question addressed in this paper is whether close-by cities that have become strongly integrated perform better compared to rather loosely integrated collections of close-by cities. In doing so we explore different types of integration: functional, cultural and institutional integration.

This paper provides the first comprehensive, uniform and European-wide identification of polycentric metropolitan areas in Europe (117 in total). For these over 100 regions, we established the extent to which the cities within them have become integrated in functional, cultural and institutional terms, and whether this affects the performance of polycentric metropolitan areas. "Performance" is measured as the extent to which agglomeration economies have developed, this is proxied with the presence of metropolitan functions.

THE EFFECT OF THE BIGGEST COMPANIES ON SPATIAL STRUCTURE IN THE EAST-CENTRAL EUROPE

Authors: *Zoltán Nagy**, University of Miskolc Faculty of Economics, Hungary; *Géza Tóth*, University of Miskolc, Hungary

Keywords: impact of companies, spatial structure

Abstract: The impact of companies on spatial structure has great significance, so it is in East-Central Europe. In our research the effects of 500 key enterprises of East-Central Europe has been examined on its city, and the effects on the broader spatial architecture were examined as well. We try to find an answer, to what extent is determined the spatial structure by these companies in the region. How does the spatial structure change over time, due to the activities of the TOP 500 companies.

P49 THE FUTURE OF CITIES BETWEEN COMPETITIVENESS AND VULNERABILITY: THE SMART CITY PERSPECTIVE

Organizers: *Flavia Marzano*, *Luigi Mundula*

Location: Room L

SLOT1 SMART CITY: DEFINITIONS AND MEASUREMENT

Chairs: *Flavia Marzano*, *Luigi Mundula* Discussant: *Christian Smigiel*

Schedule: Monday, 31 August, 17:15–19:00

SMART WAYS TO WELL-BEING

Author: *Linda Laura Sabbadini**, Istat - Italian National Institute of Statistics, Italy

Abstract: As part of a wider project to encourage and support the process of change that cities must implement to enhance the well-being of their citizens, Italian legislation (Law n° 221/2012, Art. 20) requires the definition of a monitoring system of smart cities and communities. In this paper we present the results of theoretical definition of the monitoring system designed for the national context and then we focus on the operating architecture that must be implemented.

The main objective of a monitoring system is to provide meaningful and easy to understand indicators set that can be used by policy makers, governments, citizens and firms to support implementation paths toward smart, as well as to create an assessment tool of projects started at local level. At the same time the monitoring system must be an information and control source, easily accessible by the public, that will enhance both transparency regarding the supply of utilities and accountability of policy.

In the first experiments directed to conceptually describe the smart cities, the more relevant factor has been identified almost exclusively with growth in the use of ICT applications. Over time there was also the evaluation of components related to the endowments of human and social capital and the factors related to environmental sustainability. These proposals focus only on some of dimensions and do not consider the link with the global theme of well-being, as a factor that must address the key policies to promote progress towards smartness. Consequently, there were no proposals for monitoring of smart cities and communities in which the evaluation of the increase in community well-being is the focus of the system.

DEFINING SMART CITIES: A DYNAMIC APPROACH

Authors: *Sabrina Auci*, University of Palermo, Italy; *Luigi Mundula**, University of Cagliari - Department of economic and business sciences, Italy; *Donatella Vignani*, Istat Italian National Institute of Statistics, Socio-Demographic and Environmental Statistics Department, Italy

Keywords: smart city, stochastic frontier approach, technical inefficiency

Abstract: Although the level of interest in smart cities is growing, the main issue – the smart city concept – is still open. The definition of smart city is not shared as well as the way to measure city's smartness. This declarative approach has developed the concept of an "ideal" city which every city should tend to because it represents the optimal standard.

In this context, the aim of our paper is to break with the traditional point of view in favour of a new concept of smartness, relative smartness, which identifies a city specific value of smartness, based on the efficient use of its own resources and related to the different context in which a city is situated. Thus, the concept of smartness becomes dynamic. When a city will be very close to optimal values (i.e. maximum efficient frontier) then the frontier will shift upward because of the more attractiveness of the city

and a new adjustment mechanism should be followed to become efficient again (virtuous cycle). The degree of inertia of urban government will be determined by the reaction time of institutions.

Using the stochastic frontier analysis (SFA), we estimate production functions of the main Italian cities. The distance of each city's production function from the efficient mean frontier could be explained by technical inefficiency and random noise. Then, we rank the Italian cities. To investigate the dynamic aspect of smartness, we estimate a rolling period SFA to test whether both city's production frontiers and city's ranking positions change across time.

MONITORING SMART COMMUNITIES: A HOLISTIC APPROACH

Authors: *Alessandra Ferrara**, Istat, Social and Environmental Statistics Department, Italy; *Maria Cozzolino*, Istat, Social and Environmental Statistics Department, Italy

Abstract: Compared to the experiences of monitoring of smart cities, theorized both nationally and internationally, the Italian legislation instead considers basic and directs towards a conceptual framework that is developed on the combination of smartness and well-being.

Consequently, the designed monitoring system applies a holistic approach that consider three main factors:

- As axis to read smart thematic dimensions we refer to conceptual framework of Bes projects (equitable and sustainable well-being). The project, born as a joint initiative of National Statistical Institute (Istat) and The Italian National Council for Economics and Labour (CNEL), is part of the international debate on “Gdp and beyond” and develops the central idea that economic parameters alone are inadequate to evaluate the progress of societies and should be complemented by social and environmental information and by measures of inequality and sustainability. The project, later also developed at urban scale (UrBes), is based on the analysis of 12 dimensions well-being in Italy.
- To evaluate the orientation towards the application of one or more principles of the Charter of intelligent communities (proposal on the basis of the same Italian legislative requirements) we consider a core set of principles: Transparency and simplification, Accessibility, Inclusion, Participation, Environmental Sustainability.
- As factors to achieve the objectives we select three areas of application: infrastructure applications and innovative technology; social innovation initiatives, actions in the area of planning and institutional regulation.

Finally the monitoring tool has been designed for two levels of monitoring:

- MICRO monitoring: objectives of the projects that decline the National Smart Cities and Communities Plan (PNCI);
- MACRO monitoring: economic, social, cultural and environmental floating of smart cities and communities and their levels of well-being.

SMART CITY: THE SUNSET OF THE URBAN PLANNING?

Author: *Romano Fistola**, Dept. of Engineering - University of Sannio (Benevento), Italy

Keywords: complex systems, ICT and city future, urban changes, urban planning

Abstract: The paper tries to focus the relationship between the smart city and the urban planning of the future human settlement. Considering the city as a complex system (and by identifying its different subsystems) the town planners have to deal with a completely new “state” of the city in which the new technologies (ICT) are able to manage the evolution of the system. Thanks to ICT we will be able to check, in real time, when the urban system will go out from its trend of sustainability and we will be able to act in order to correct this wrong evolution (characterized by a production of entropy). With regard to this the canonical approach to the spatial planning will be useless in order to manage a real smart city. It will be really so? The paper starts with a focus about the concept of urban smartness. The idea is try to propose a different way to identify it. The urban smartness could be thought as a factor useful to mitigate urban entropy and not just calculable by using set of variables. Moreover the urban smartness can be identified by considering the level of negentropy of the urban subsystems. Technological transformations drives towards a rapid changes of the functional weights inside the city and these conditions allow a radical modification of the urban system as a whole. To manage these changes it is necessary to develop a new way to control the evolution of the future cities and have to be done in real time.

SMART CITY: SIMPLY A “BRANDING STRATEGY” FOR ADDING VALUE?

Author: *Franca Miani**, University of Parma, Italy

Keywords: creative cities, Italy, smart city

Abstract: Cities today are equipping themselves to meet the challenge of a sustainable future, and local governments increasingly aspire to international classification as a “Smart City” in order to attract capital, human resources and creative economic activities. This study starts with an overview of the different meanings of the term Smart City, and then discusses how smart cities are ranked. Next, the significance and dynamics of these classifications are analysed and compared. Promotion and marketing aspects are discussed. The study aims to assess whether the Smart City in fact constitutes a valid system of technological and intelligent planning, raising the quality of life and making cities more sustainable in different dimensions, or whether it is simply a new type of urban branding used by local government to obtain funding and propose schemes which are largely irrelevant to actual requirements of the city and its future. The research is based on Italy, and gives examples from medium-sized historical cities.

DEALING WITH SMARTNESS AT LOCAL LEVEL: EXPERIMENTS AND LESSONS LEARNED

Authors: *Nadia Mignolli**, Italian National Institute of Statistics - Istat, Italy; *Alessandra Fasano*; *Roberta De Santis*; *Anna Villa*

Keywords: big data, methods, political-territorial control, smart territories, urbanization

Abstract: During the last decades, cities have become increasingly central in the economic, environmental, social and development-related processes, representing a real focal point of the political and economic strategies. Within this framework, the strong correspondence between urban environment and Information and Communication Technology (ICT) becomes evident and it is a necessary condition, even if not sufficient, to address local challenges, also in terms of smart sustainable development.

In this framework, since 1990 the term “Smart City” has been spreading in conjunction with the liberalisation of telecommunications and the development of services provided through the Internet. However, its definition is likely to remain too general and unshared. The term Smart City has recently become synonymous with cities characterised by an extensive and intelligent use of digital technologies that enable an efficient use of information, even if, actually, intelligent cities imply much more than this, as clearly illustrated in the relevant literature.

The process of transforming a city into a Smart City is complex and multidimensional. The smart city transformation affects many aspects of a city operations, including government, buildings, mobility, energy, environment and services. In addition to the complexity involved in coordinating and connecting all the issues illustrated above, initial goals can change over time as planners and developers work to achieve more and better results.

This study aims at critically analysing the main features related to Smart Cities such as terminological issues, the heterogeneous theoretical background and the methodological limits of the existing measurement experiences.

SLOT2 SMART ENVIRONMENT AND TOURISM

Chairs: *Flavia Marzano*, *Luigi Mundula* Discussant: *Dolores Sánchez-Aguilera*

Schedule: Tuesday, 1 September, 08:30–10:15

URBAN TOURISM AS AN ACCELERATOR OF URBAN SMARTNESS?

Author: *Rosa Anna La Rocca**, Università di Napoli Federico II, Italy

Keywords: smart city, urban planning, urban system, urban tourism

Abstract: Trends in tourist statistics show that “urban tourism” is increasing its share in total leisure travel. Most European cities show continuous increase rates as tourist destinations (+ 8.1% in arrivals). Although urban tourism is constantly gaining in importance, there are few attempts to examine benefits of integrating this phenomenon into urban government processes. The transition toward the “smart city” should promote alternative and more integrated processes to manage the complexity of urban systems. But, at present, the main attention seems to concentrate on the number of apps available to make the tourist experience more fascinating. It seems to emerge a significant imbalance in favour of the promotion of the city (image, culture, history, etc.) through innovations of product (app., sensors, electronic circuits, etc.) rather than the definition of a planning process to optimize the positive effects of tourism, making urban system more efficient.

The importance of tourism for its economic aspect (for instance, in Italy it contributes to the 9% of GDP) should make reflect about the need of pursuing cooperation among different levels and actors involved in the governance process of the urban system.

This work attempts to contribute to this issue by re-considering the relation city-tourism and proposing the integration of tourism development into objectives of urban liveability, also in order to implement the competitiveness of the city. In this sense, smart city would be a new way to approach urban complexity rather than a “claim” to get a high value in the various ranking measuring urban smartness.

THE “SMART” SIDE OF LANDSCAPE: THE LINKAGES BETWEEN TOURISM AND WELFARE POLICIES

Authors: *Andrea Salustri*; *Luigi Mundula**, University of Cagliari - Department of economic and business sciences, Italy

Keywords: economic inequalities, smart territories, tourism

Abstract: Due to its multidimensional nature, the suitability of the smart city paradigm can be threatened by the existence of explicitly or seemingly conflicting issues. Specifically, our research investigates the apparent dualism between aesthetical and ethical characteristics of landscape, and its territorial management in a smart environment.

Indeed, we highlight how, on the one hand, the Travel & Tourism (T&T) industry has obtained consistent benefits from globalization, becoming a key sector for the economic development of a country, in both advanced and developing economies. On the other hand, it is a matter of fact that globalization has raised inequality, poverty and social exclusion, threatening the sustainability of the world economy on several dimensions.

Moreover, we stress how, if Travel & Tourism are more related to issues concerning happiness, as defined in the recent international debate, on the other hand social inclusion and welfare policies are more related to participation and agency (i.e. human development).

Laying on these premises, in this paper we focus on the achievements of the T&T industry, and on the debate concerning the guaranteed minimum income (GMI). Finally, we try to sketch a simple model and to provide statistical evidence of how major improvements in one sector (say, the social dimension) can positively affect economic results of the T&T industry as a whole, and viceversa.

EVALUATION OF IMAGE AND ATTRACTIVITY OF TOWNS – SLOVAK CASE STUDY

Authors: *Ladislav Tolmaci**, Slovak geographical society, Slovakia; *Mydlová Anna*; *Cákoci Rastislav*

Keywords: cultural environment, life satisfaction, spatial imaginaries, tourist movement, urban changes

Abstract: Settlements differ in many aspects size, population, nature, economic activity, history etc. All these phenomenon are accumulated in one common feature which can be expressed in terms of image or attractivity. For obtaining this evaluation it is necessary to use combined research methods objective data sources on tourism data and survey on perspectives of towns from the view point of young generation living in towns. The paper is devoted to introduce innovative methods (AQITI, EQI) in evaluation of Slovak towns according their image.

URBANSAPES OF DISASTER. THE LOCAL IN VULNERABLE COMMUNITIES ENDURING IN A MIDSIZED CITY IN MEXICO

Author: *Frida N Guiza-Valverde**, Universidad Nacional Autonoma de Mexico, Mexico

Keywords: natural disaster, right to the city, social vulnerability, urbanization

Abstract: This paper is an in-depth analysis, of the sociopolitical and environmental conditions in two different vulnerable communities settled on a middle size city in Mexico, both share one geographical common space that render people vulnerable to hazards and disasters. This study case illustrates the current Latin-American dislocated and fragmented model of urbanization, propelling poor people to dwell in informal hazardous places. For this case, we found that flood hazards, even extreme floods are bearable for the people, and these extreme events are not the main concern for the inhabitants of the area; the main concern for both communities to endure in the place is land tenure. Vulnerability to disasters as a theoretical framework uncovers the social environmental and spatial divergences between people and urban physical spaces Disaster Risk Reduction polices must consider the profound drivers making people to endure in a hazardous site. The unequal space distribution, excessive housing commodification in a context of corruption, patronage and clientelism, are the main factors enhancing vulnerability to disasters.

SUPPORTING THE SHIFT TOWARDS SMART CITY REALITIES IN THE GREEK ENVIRONMENT

Authors: *Maria Siti**, National Technical University of Athens, Greece; *Efthimios Bakogiannis*; *Avgi Vassi*

Keywords: Greece, smart territories, urban e-space

Abstract: “Smart cities” is an emerging concept in the Greek environment that introduces practices related to the European and worldwide discourse about priority areas for online services for citizens and authorities. Local innovation systems, largely supported by digital networks, aim at assisting the development of networks and enhancing the digital content of services in several areas of policy making/decision making. Greece, so far, has achieved a rather slow progress in the implementation of the above concept, based on the visualization of the urban concept and the digitalization of spatial information and some services.

The aim of this paper is to explore the concept of smart cities as implemented in various Greek cities in the last decade, as well as to provide the following methodology steps towards real innovation systems and applications of worldwide accepted techniques in the field of smart cities. The first part includes the analysis of the “smart cities” notion as regarded and applied in Greece while the second deals mostly with describing the specific applied practices. The third part focuses on introducing the necessary steps towards smart cities in an attempt to tackle economic vulnerability and approach environmental resilience.

SLOT3 SMART TOOLS AND CITIZENS INVOLVEMENT

Chairs: *Flavia Marzano*, *Luigi Mundula* Discussant: *Franca Miani*

Schedule: Tuesday, 1 September, 10:45–12:30

A GIS METHOD IN SETTLEMENT GEOGRAPHY

Authors: *Zita Bognár**, Doctoral School of Earth Sciences, University of Pécs, Hungary; *Péter Gyenizse*

Keywords: distance, evaluation, GIS, housing, intra-urban comparisons, post-socialist city, urban planning, urban space

Abstract: In our presentation we demonstrate the process, the advantages, the disadvantages and the future developmental possibilities of a multifactor GIS model. We created a method in which our goal was to quantify and represent the townsmen's opinion related to their place of residence.

We asked one per thousand of the inhabitants of numerous Hungarian cities to fill up a questionnaire which contained 25 factors. They had to qualify these factors with scores on the basis of their needs and preferences. There were some factors which directly referred to properties, and the remaining related to the proximity of educational, cultural and infrastructural services.

We also collected spatial data. The unit of the examination was a block of house. The data was processed using an Idrisi Selva GIS program with which we prepared a classifying map of the areas. The 25-layer GIS processed data was analyzed for details of problems of the low value areas. The model may serve as a tool to familiarise decision makers with these factors and provide an opportunity for intervention.

The model showed significant divergence when it was compared to the prices of properties which was used for control. So we have to correct these control data with the time of building, furthermore instead of the classic city parts we have to mark off uniform building units for control. We have to increase the accuracy of digitising, and the distance-limits have to be refined. After these modifications the model will be suitable for processing more detailed examinations.

IMPROVING SMART LAND PROJECT COOPERATION: A COWORKING MATRIX MODEL FOR ONLINE WEB BASED GEOSMARTCITIES APPLICATIONS

Authors: *Michele Angelaccio*, University of Rome Tor Vergata, Italy; *Alessandra Basili**, University of Rome „Tor Vergata”, Italy; *Berta Buttarazzi*, University of Rome „Tor Vergata”, Italia

Keywords: Italy, map, tourism, tourism activity, urban region

Abstract: Smart Tourism is leading to study many topics field of Smart cities and other technologies in conjunction with Cultural Heritage requirements, which are hard to manage in a traditional working set. In particular this is leading to study how new web technologies could be integrated in such complex and dynamic business scenarios. In this paper we propose an abstract organization model for cooperating among project working people who are aimed to build geo based smart infrastructure for promoting cultural areas around big cities like Rome. This is based on a Land-Themes matrix for which each entry is associated to a working session between land coordinators and theme experts. As application we show the user interactive paradigm used to build graphical web interface used in the online working platform and how it can be derived from co-working matrix model in an easy way.

ANALYSIS OF LOCATION THE SOLAR PANELS, THE KEY TO INCREASING RENEWABLE ENERGY IN THE CITY

Author: *Mateusz Ilba**, AGH University of Science and Technology, Poland

Keywords: Insolation, planning arrangement of solar panels, self-sufficient buildings, solar energy

Abstract: Effective deployment of solar panels on the high-rises and small buildings requires advanced GIS analysis in 3D space. The panels can be placed in the horizontal and vertical plane on the building. Connection the projected 3D model of buildings and a mathematical description of the environment, in particular the solar illumination model, leads to the conclusion which panels have the ideal place. The use of relationships attributes of energy generated by a single solar panel, makes it easier to decide to accept its placement.

The proposed approach to the problem of deployment solar panels on the buildings, is the use of GIS combined with CAD systems to do advanced solar analysis of the proposed solar installation. Each panel can be described by attributes with insolation data. This allows us to visualize the amount of energy a single solar panel. Using CAD systems we can simulate motion solar panels during the analysis. This helps to better simulate the work of the proposed system of solar panels. Having a specific values for individual solar panels we can remove from the project panels, which will give a small amount of energy.

The study can increase economics of solar energy production in cities. This is an important aspect in reducing pollution in the city. Assuming progress in increasing the efficiency of solar panels, is possible to design self-sufficient buildings in city.

ENCOURAGING NEW PATTERNS OF URBAN EXPERIENCE THROUGH THE INTERCONNECTION BETWEEN MOBILE APPLICATION, ONLINE SERVICES AND THE INTERNET OF THINGS

Author: *Alessandro Prunesti**, Università Europea di Roma, Italy

Keywords: internet of things, mobile experience, smart city, social geography

Abstract: The rapid spread of social and mobile platforms enable people to experience progressively new patterns of experience with their own territory. The gradual interconnection between smartphones, online platforms and objects, a fundamental characteristic of the Internet of Things, allows users to produce and share a real-time large amounts of information and data. Today the broader concept of “Smart City” needs to be accompanied to the concept of “Smart Citizen”. The new challenge for the geographer is to design new patterns of experience, digital and mobile-driven, which bind the citizens to their territory in so virtuous ways. In particular, the social geographer must design and promote the development of new crowd-sourced digital services necessary for the development of three crucial aspects for the 21st century cities: the protection of the environment, the urban mobility and the public safety. Designing experiences that enable people to relate in a new way with their reference territory must be the result of a work that integrates multidisciplinary expertise. The geographer is also required the ability to analyze large amounts of data generated by user behavior and their interconnection with the environment and the urban objects, to help the delivery of new policies for urban and regional development. The work will be based on the analysis of the platforms that can be used in a virtuous way and on case studies referred to their application on the urban territory.

BARCELONA SMART CITY: THE GAP BETWEEN MUNICIPAL POLICIES AND PUBLIC PERCEPTION

Authors: *Dolores Sánchez-Aguilera**, Universitat de Barcelona, Spain; *Jaume Font-Garolera*, University of Barcelona, Spain; *Petros Petsimeris*

Keywords: smart city, urban changes

Abstract: In an urban and ever more interconnected world, competitiveness and competition between cities is becoming increasingly evident. Attracting businesses, tourist flows, the supply of jobs, organizing major international events make large cities compete with each other to attract investment. At the time, cities must be sustainable and offer its citizens a better quality of life. An approach from the principles of smart city can help to achieve these goals. The aim of paper is to analyze the projects which contribute to apply the concept of smart city in Barcelona. This city, a pioneer in the field of urban planning in Spain, is a city of reference in the new context smart. The paper reviews the initiatives and value their novelty and contribution to the quality of life of its inhabitants. The study of smart projects in Barcelona and its projection highlights the gap between municipal policies and public perception of urban changes.

Chairs: *Flavia Marzano*, *Luigi Mundula* Discussant: *Frida N Guiza-Valverde*

Schedule: Tuesday, 1 September, 15:00–16:45

INCLUSION AS A KEY CONDITION FOR SMARTNESS

Authors: *Flavia Marzano**, Stati Generali dell'Innovazione, Italy; *Luigi Mundula*, University of Cagliari - Department of economic and business sciences, Italy

Keywords: disability, elderness, gender, inclusion, innovation, life satisfaction, smart territories, social innovation, society renewal, territorial consciousness, wister

Abstract: Equality between women and men is a fundamental value of the European Union enshrined in its Treaties and in the Charter of Fundamental Rights of the European Union. The integration of the principle of equality between women and men is an important part of all the Commission's activities and is the general approach to the implementation of all EU policies. However, the position of women and men shows still considerable differences. For example, compared to men, the female employment rates are lower, women also have a lower political weight and are more exposed to poverty. Women are the majority of the EU population (52%) but they represent only 35% of the members of the European Parliament. Talking about smartness, a territory (or a city) can not be smart if it is not inclusive and it is not inclusive if it excludes half the population: women. The problem is not so easy to solve especially because the cities are mainly governed and designed by men. A smart city must provide the active participation of all stakeholders (women, elder people, disables, young people,...) both during the planning and the execution of innovative projects: this is the only way to ensure at least the attention to the needs of all the stakeholders.

SMARTNESS AS A WAY OF LIFE: TOWARD A NEW URBAN ORDER?

Author: *Daniele Mezzapelle**, Gabriele d'Annunzio Univesity, Italy

The attempt to outline new forms or new trajectories about the future city represents an attractive challenge, all the more if the research starts from the interesting dichotomy competitiveness/vulnerability of the city, conceived and observed according to the new values of smartness. So, the aim of the paper is to provide a definition of urban smartness concept, which is so pervading in actual paradigms, generating a varied phenomenology and even more considerable amount of smart cities. Analysis wants to investigate the closer connection between smartness and urbanity where none other future seems possible for the city than that "intelligence based". The paper wants to understand the new urban order dynamics, by his strength points (competitiveness) and weak points (vulnerability) and the real impact of smartness on the smart-citizen's everyday life. Furthermore, it seems relevant for this purpose, to examine in depth the relation between paradigm and territorial dimension, analyzing the optimal scale of applied smartness, eventually exceeding that of urban borders. Finally, the evocation of famous essay by Louis Wirth is justified by the similar and revolutionary reach that an innovative perspective, then and now, establishes about the issue: is the smartness a widespread, universal and absolute phenomenon which identifies a new – and future – way of life?

WHY ROME IS NOT (AND WILL NEVER BE?) A SMART CITY

Author: *Stefano Ancilli**, La Sapienza University of Rome, Italy

Keywords: governance, smart territories, urbanization

Abstract: In the last decades most of the biggest cities in the World started new policies to become more and more smart. The main goals are about the same:

- to achieve zero waste by a certain date;
- to reduce gas emission by a certain percentage;
- to create a better communication and online databases;
- to support new start-up;
- to improve the quality of life thanks to technology.

In Rome most of the smart projects are private and the City is deeply late in adopting smart strategies. The methodology to understand the delay is to compare Rome with other cities around the World, both in Europe and United States. The aim of this paper is to understand the reasons why Rome is not yet a smart city and what the City has to change to become smarter.

THE CITY OF THE FUTURE? SMART CITIES FROM A DIFFERENT PERSPECTIVE: DECONSTRUCTING THE CURRENT BOOM OF SMART CITY ACTIVITIES IN ITALY

Author: *Christian Smigiel**, Erfurt University of Applied Sciences, Germany

Keywords: crisis, smart city, urban planning

Abstract: The paper will explore multiple linkages between smart city debates, models, projects and politics by taking the example of Italy which has become a frontrunner in terms of smart city activities in Europe. Therefore the paper will view the current boom of smart city initiatives from a multi-scalar perspective. Starting with the politico-economical frame the paper will in a first step study the connectivities between crisis, austerity politics at the macro level as well as smart city policies at the local one. By providing a brief genealogy of the smart city in Italy, it gets clear that the smart city is one of the most proliferated and embedded discourses that is frequently used by policy-makers, entrepreneurs as well as the ICT sector. In a second step the paper will try to elaborate why the smart city in its current form can be interpreted as an element of a wider neoliberal and post-political rationale.

LIVING LABS FOR CREATING SMART URBAN FUTURES

Author: *Yvonne Franz**, Austrian Academy of Sciences, Austria

Keywords: co-creation, living labs, methods, smart city, Vienna

Abstract: Since the mid-1990s, the smart city concept has been extended from a technological-centred understanding on how to ensure cities' competitiveness on a global scale to a concept that includes social considerations too. Current smart city discussion deals with the core question of how to design the transformation into smart cities in an innovative and socially inclusive manner. As a result, living lab approaches were implemented as a methodological answer of how to operationalise the smart city concept. All over Europe, various examples in urban development indicate a new trend of implementing living labs to create smart urban neighbourhoods.

This paper focuses on living lab approaches as a promising instrument in urban research that tackle the issues of (social) innovation creation, social inclusion and co-creation processes. Although current living lab concepts are still based on technologically-centred and innovation-driven paradigms, a shift towards a more nuanced understanding of living labs can be identified. This paper examines the possibilities and limitations of using living labs in smart city concepts with a focus on social-spatial research questions. It identifies current approaches and gaps in living lab concepts and contributes to a more differentiated understanding of living lab design that fit socially-centred research within the smart city debate better than previous concepts.

P50

THE (IR)RELEVANCE OF B/ORDERING: BORDER (RE)ENFORCEMENT AND BORDER DISPUTES IN THE EUROPEAN UNION

Organizer: *Béla Filep*

Location: Room E

SLOT1

Discussant: *Péter Balogh*

Schedule: Monday, 31 August, 13:00–14:45

SEPARATISM AND THE BORDERLESS EUROPE MYTH

Author: *Jaume Castan Pinos**, Department of Border Region Studies, University of Southern Denmark, Denmark

Keywords: ethnic conflict, separatism

Abstract: For many decades the EU had convinced itself that it had been able to rid itself from territorial conflicts through political and economic integration in a supranational organisation. In a way, EU integration was perceived as a panacea that would eventually free the old continent from the territorial conflicts. Underpinning this narrative, there was a self-proclaimed myth according to which the EU had successfully been able to become a post-national/post-territorial entity. Such entity, according to this myth, had managed to overcome territorial conflicts through political and economic integration. This article will attempt to deconstruct such myth by claiming that territorial problems persevere and persist despite - or perhaps because of - decades of European integration.

To illustrate the argument, I will focus on separatism. 2014 was a prolific year in terms of secessionist disputes in Europe and beyond. Separatism has, indeed, become a problem by its own right in the European Union. This growing phenomenon opens up a myriad of interesting debates related to the very ontology of borders. A theorization of separatism, based on scholarly review and empirical research conducted in Kosovo and Catalonia, will serve to explain the socio-economic and political conditions and environments that favor its development.

THE LAW SHAPES THE TERRITORY. SPATIAL CONSEQUENCES OF A TOPOLOGICAL CHANGE ON THE NOTION OF BORDER FROM A POLITICAL AND LEGISLATIVE POINT OF VIEW

Author: *Antonio Giraldez Lopez**, Landscape Lab of DPA. Politechnical University of Madrid, Spain

Keywords: border, bordering, Europe, European Union, geopolitic, political-territorial control

Abstract: The following research, carried out during Landscape Laboratory at Politechnical University of Madrid, focuses on the analysis of the spatial consequences that European territory has suffered due to a topological change in the Frontiere notion observed from a political and legal point of view.

We cannot keep understanding border as an abstract line or division which is separating two territories, we must think borders as a much more complex mechanism in which different realities are simultaneously overlapped. As a consequence the physical boundary element is reduced to a purely symbolic condition. A topological change has been produced in which The Border has changed to a new situation in which it already has a spatiotemporal dimension which covers the whole territory that is supposed to be enclosing. Border has become an potentially present organism in the territory in which is inserted, and it has been structured in a way that there is no place to be free from its scope. Europe has become his own Border.

Therefore, investigation focuses on the legislative *dérive* configured by the European Union, through different laws and programmes. They have defined, from different plans of action, European boundaries and its territory. This material has allowed to explain the simultaneous phenomena of reinforcement, dematerialization and externalization of the European borders and its practical (both legal and executive) application onto the migrant and citizen body; this condition allowed us to establish a set of patterns and trends which could potentially be reached in the following years.

MEASURING THE IMMEASURABLE – A NEW APPROACH FOR THE ANALYSIS OF CROSS-BORDER COOPERATION AND THE NOTION OF 'DEBORDERING'

Authors: *Andras Nyeste**, Central European Services for Cross-Border Initiatives (CESCI), Hungary; *Roland Hesz*, Central European Service for Cross-Border Initiatives (CESCI), Hungary

Keywords: cross-border cooperation, openness of borders, territorial cohesion, territorial statistics

Abstract: Meanwhile Cohesion Policy intends to break down boundaries (“debordering”), the enforcement of borders seems to remain actual in many aspects. The separating role of borders appears in different territorial observations, social and governance practices which harden the measurement of cross-border flows and cooperation. In fact, the impact of territorial cooperation on the society is weakly argued in the case of cross-border regions.

Despite the numerous policy papers that have assessed the territorial aspects of cohesion, there is a lack of methodology regarding the measurement of intensity of cross-border cooperation. It is related to the lack of interest of national statistical agencies that do not collect data for cross-border flows, and to the difficulties of quantifying cooperation.

Contributing to the achievements of some related ESPON projects and Eurostat publications, we tried to elaborate a methodology, which tries to capture the “borderless” features of a cross-border area according to the intensity of cooperation. We aimed to create a methodology that can be used in scientific research, territorial analyses and the monitoring of cross-border cooperation programmes. By elaborating a model of data collection and analysis, the characteristics of changes of border regimes, affected on the intensity of cross-border co-operations, can be modelled and compared. We can get “objective” information regarding the mental boundaries.

Besides drawing up this new methodology and practise for data collection we tested them in a case of a given cross-border region.

MYTHS OF TERRITORY AND EXTERNAL BORDERS IN THE EU'S CONTEMPORARY IDEA AND EUROPE IN THE MIDDLE AGES

Author: *Alessandro Vitale**, University of Milan, Italy

Keywords: borderlands studies, EU Cohesion Policy, Europe, post-social transition, spatial analysis, territory

Abstract: Taking into account the interplay between geography and politics, and the possible contribution of geography to contemporary policy-making, the issue of EU's external borders and European territoriality seems to be one of the most challenging and difficult subject of contemporary world. In recent years the European spatial development policy discourse has taken an evident territorial character. The idea of both “territorial continuity” and “territorial cohesion” shows how relevant the notion of territoriality in the “European discourse” is and how accepted in political theorizing is the tool of hard and closed boundaries and a sharp inside/outside dichotomy. Hard border policies and practices on the borders mirror the existence of a de facto barrier and a deep “Westphalian memory” in the way to use the territory as a tool to support a (projected) perfect political unit. Europe has always been distinguished by its openness to the rest of the world. It has never been a clearly demarcated continent or a fixed bordered entity. The Middle Ages in Europe was characterized by overlapping, divided authority structures and often contentious jurisdictions, without territorial containments and a clear notion of the border. The EU's drive to re-territorialize the Western and Central part of Europe is not a mere academic question: it has very real consequences for our lives and for peoples, places, States and regions. This process of European “re-territorialisation” may hinder the processes of both interaction and cooperation across the EU's external borders and stimulate many problems and political difficulties.

P51 THE ROLE OF PLACE NAMES IN GEOGRAPHICAL EDUCATION

Organizers: *Peter Jordan*, *Cosimo Palagiano*

Location: Room D

SLOT1 PLACE NAMES IN THE CONTEXT OF GEOGRAPHICAL EDUCATION

Chairs: *Peter Jordan*, *Cosimo Palagiano*

Schedule: Monday, 31 August, 13:00–14:45

SPATIAL PERSPECTIVE IN GEOGRAPHICAL EDUCATION

Author: *Hein Raghoobar**, University of Suriname, Suriname

Keywords: place names

Abstract: This report focuses on the theme „Spatial Perspective in Geographical Education” as a contribution of Suriname. The theme has connection with the „Fifth EUGEO Congress on the Geography of Europe” in Budapest, Hungary on 30 August – 2 September 2015, at Eötvös Loránd University. Topic of the conference is „the Role of Place Names in Geographical Education”.

Daily there is worldwide a teaching learning process of knowledge transfer, understanding and skills in geography, rather than on the role of place names that opens the door to a greater understanding of the changing world in which we all live. Education in the role of place names in geography should be seen as basis of spatial orientation, spatial perspectives, imaging of the world of places and digital orientation in the Global Village: the transition of the earth in a „World Wide Web” (internet) village of digital information systems. The orientation in a Global Village requires the use of Information Communication Technologies (ICTs), the digital Geographic Information System (GIS), animated maps with geographical information and transition of science research from interdisciplinary to trans-

disciplinary Geography study is often identified with memorizing facts about place names, capitals, rivers, products, heritage, culture and other seemingly trivial things. Students, however, are more concerned about understanding why things are located where they are and how they are related to the location or other features, knowledge which allows them to see how historical processes of cultures, heritage and present activities influence places. Students are also interesting in the nature of human experience with places.

THE GEOGRAPHICAL NAMES IN THE PRIMARY AND SECONDARY SCHOOLS

Author: *Cosimo Palagiano**, Sapienza Università di Roma, Italy

Keywords: place names, street-naming

Abstract: The geographical place names in the primary and secondary schools

Primary and secondary textbooks are far from adequately presenting historical, linguistic, geographical, cultural, political traits, related not only to the names of the cities proper but also to their outer and inner parts. School textbooks neglect or pay scarce attention to names of landscapes, regions, morphology, hydrography and vegetation as well as to roads, streets, squares, monuments. Important issues related to cities which are generally ignored in school textbooks concern the reasons behind the foundation of a city or for its natural birth. Cities may have been founded for their central position or may have arisen spontaneously thanks to natural environmental factors. Human factors such as the naming of a city after it (the eponymous hero) and political events responsible for a change in the place name or the restoration or conservation of preexisting names. If we now turn to textbooks of the courses of history and geography of the primary and secondary schools, we will observe that drawbacks we have pinpointed are overwhelming. Most of the textbooks do not contemplate the different aspects of place names: (i) meaning; (ii) the derivation of the name of the founder; (iii) the event or the character which they refer to; (iv) the location of a specific activity such as an exploitation of a mine, an industry etc.; (v) the name of a saint, a sailor, a hero. Although they may undergo name changes for reasons of urban policy, names of streets, roads, squares and monuments related to outstanding people and major events should be included in school textbooks. It is also important to know the history of the spread of place names in the world.

THE IMPORTANCE OF USING EXONYMS. ON THE USE OF EXONYMS IN SCHOOL ATLASES AND OTHER EDUCATIONAL MEDIA

Author: *Peter Jordan**, Austrian Academy of Sciences, Institute of Urban and Regional Research, Austria

Keywords: criteria, exonyms, place names

Abstract: Names of geographical features, i.e. toponyms are politically and culturally sensitive, since they are symbolic markers of space-related identity. This is true for endonyms in the sense of place names used by a community for features on its own territory and even more so for exonyms in the sense of place names used by a community for features outside its territory, since the latter are often associated with territorial claims. The use of exonyms is therefore not only to be discussed in terms of its benefits for communication and as regards the acquisition of cultural techniques (e.g. of a geographical view of the Earth, of the ability for topographic orientation), but also under the aspects of political and cultural reasonability.

Exonyms are nevertheless important in geographical education, and school atlases as well as other educational media are even the field most suited to apply them. This is so for three main reasons: (1) Exonyms are morphologically and phonetically adapted to the receiver language. (2) Exonyms can easily be used according to the grammar of the receiver language. (3) Most exonyms have a long tradition in the receiver language. So they correspond to place names used in historical contexts, street names and names of features of the daily life like foodstuff or drinks.

THE ROLE OF PLACE NAMES IN GEOGRAPHICAL EDUCATION IN SOUTHERN AFRICA

Author: *Peter Edmund Raper**, University of the Free State, South Africa

Keywords: indigenous languages, linguistic landscape, linguistic interaction, place names

Abstract: Geographical names constitute a significant component of geographical education, facilitating communication and uniquely identifying geographical features, containing elements of identity, culture, social and other realities, and reflecting interaction between the geographical environment and its inhabitants. The presence of different ethnic and linguistic communities in Southern Africa has resulted in place names from different languages, the occurrence of more than one name for the same feature, the same name applied to different features, and names conflict that necessitates standardization at national and international level. Southern African place names derive from a vast array of Bushman, Khoikhoi, Bantu and European languages. These names reflect the history and cultural stratification of the various peoples, the interaction between their languages and cultures, and preserve toponymic elements as fossilized remnants of ancient and extinct languages and cultures. This paper investigates the interaction between humans and their environment as reflected in place names, including the diachronic evolution from Stone Age Bushman toponyms to modern illocutionary onymic formation. The relevance of the inclusion of Southern African toponyms in geographical education within the context of the EU is in accordance with United Nations recommendations on the standardization of geographical names, as well as with pragmatic considerations of the universality of toponymic usage.

TOPONYMS IN CROATIAN GEOGRAPHICAL EDUCATION

Authors: *Ivana Crljenko**, The Miroslav Krleža Institute of Lexicography, Croatia; *Ružica Vuk*, Faculty of Science, Department of Geography, Zagreb, Croatia

Keywords: Croatia, geography education, toponyms

Abstract: Within the Croatian elementary school education toponyms are well represented in geography and history classes. In high school, students are additionally introduced with toponyms within other courses. At the university level toponyms are embedded in

studies of geography, geodesy, history and Croatian language. Theoretical knowledge of toponyms is acquired within few university courses. In geography classes, the fifth-graders are introduced with the names of the continents, oceans and seas, islands, deserts, rivers, etc. These names are adapted in the Croatian language so there are no problems with toponyms. Since the sixth-graders learn about non-European continents and polar-regions, they encounter the names of settlements so the first problems with foreign toponyms occur. The seventh-graders learn about Europe and Russia so the problems increase. It is only in the eighth grade when they learn about Croatia that the problems reduce. Since the geography gymnasium program is similar to the one in elementary school, problems with exonyms, such as the ways of writing and reading them, the criteria for using them, the usage of certain adaptation system, are identical to those in elementary school. Regardless of their ubiquity in the education and public space, exonyms are not studied systematically. Disparity in writing and the use of exonyms is evident in the geographical school literature, because the authors of textbooks and atlases offer different variants of toponyms. It remains unclear which variants will pupils adopt and use in further education. This presentation highlights some problems regarding toponyms on three levels of geographical education.

URBAN TOPONYMY AS A TOOL FOR GEOGRAPHICAL EDUCATION. BARCELONA AS A CASE STUDY

Author: *Joan Tort Donada**, Universitat de Barcelona, Spain

Keywords: geography education, place names, urban planning, urbanization

Abstract: The aim of this communication is to present the onomastics of the public space of Barcelona, focusing essentially on the toponyms used in the city's urban street system (i.e., the names taken by its streets, squares and avenues, and other elements in this system), in order to explore its potential use in geographical education at different levels and scales.

The study is limited to a specific selection of names: one hundred in total, distributed between two quite distinct city districts: the Old Town (known by the city's inhabitants by its Catalan name, Ciutat Vella) and what in 1859 became known as the New or Modern Town, referred to more generally as the Eixample. These hundred names have been chosen on the basis of the linguistic or morphological characteristics of the toponyms. In practice, the selection has sought to reflect principles of historical and geographical affinity between the toponyms and the urban space in which they are used.

As well as analysing the names selected, the study seeks to undertake a comparative study of the two groups of names, the aim being to provide a qualitative summary of the fundamental characteristics of the basic onomastics of the public space of Barcelona. The basic premise underpinning the study is that any odonymic system may provide "strategic information" of use in geographical education; and this is especially apparent in the case of Barcelona.

SLOT2 OTHER ASPECTS OF PLACE NAMES

Chairs: *Peter Jordan, Cosimo Palagiano*

Schedule: Monday, 31 August, 15:15–17:00

STREET NAMES AND OTHER NAMES AS PART OF THE LINGUISTIC LANDSCAPE:

Author: *Botolv Helleland**, University of Norway - Language Council of Norway, Norway

Keywords: linguistic landscape, street names

Abstract: That which we may describe as the linguistic landscape of an area, a town or a neighborhood consists of various types of expressions. Most important are the place names, including names of streets and plazas. But also the names of houses, buildings, commercial and other enterprises disseminate their messages. When walking through an urban street one is bombarded by linguistic messages, not only street names, but even more by brand and fashion names, graphics, flashing signs, etc. Even the shape of the various buildings and skylines convey their messages, if not explicitly in language, so by their pure appearance, like churches, governmental buildings, and universities to mention a few.

Questions to be discussed in the paper are then: what constitutes a place in relation to space, what is the relationship between place and name? How do place names and commercial names interfere with each other, and how do they define urban space? Some answers will be given based on recent research.

In order to give local citizens a possibility to learn more about their linguistic landscape a walk was organized by the present lecturer through the main street of Oslo, Karl Johans gate. It turned out to be a quite successful way of disseminating understanding of names and other space related linguistic expressions.

CLAIM CHORONYMS AS A TOPONYMIC TOOL OF PROPAGANDA

Author: *Wojciech Włoskiewicz**, Poland

Keywords: choronyms, exonyms, place names, propaganda, semantics

Abstract: The aim of the paper is to introduce the concept of claim choronyms and to discuss their semantics and use as a linguistic tool of propaganda employed to manifest present or past power or claims to a given territory. The introductory theoretical part discusses a semiotics-based understanding of proper names in general and of choronyms in particular. The semiotic approach to the semantics of geographical names does not perceive them only as labels attached to geographical features. According to the semiotics-based model of choronymic semantics three types of claim choronyms are discussed, depending on the type of name modification. These are: formal, conceptual, and formal-conceptual claim choronyms. The phenomenon is discussed with reference to the current exonym-endonym-debate and is illustrated with examples from the 19th century as well as with the newest ones, e.g. Novorossiia, Donetsk People's Republic, and Luhansk People's Republic.

AUSPICIOUSNESS AS BANALITY: THE (RE)NAMING OF RAILWAY, METRO STATIONS AND URBAN STREETS IN POST-COLD WAR TAIPEI

Author: *Peter Kang**, Dept. of Taiwan and Regional Studies, National Donghwa Univ., Taiwan

Abstract: The paper explores the naming and renaming practices of railway stations and urban streets in Taipei metropolitan area after the lifting of martial law. Taipei has been the political and economic center of Taiwan since the Japanese colonial period and later served as provisional state capital of the Chinese Nationalists after the World War Two. Taiwan has entered the stage of democratization since the 1990s after the lifting of martial law in the post-Cold War era, and the naming and renaming of public space are freed from the ideological and political dominance of Chinese Nationalist. Since then the toponymic naming is the post-Cold War era is de-political and de-commemorative in nature. Nevertheless, the naming practices in the state capital are affected by the mixing of nationalistic legacy and emerging global neo-liberal ideas, which are manifested by the auspicious symbolism without any direct meaning to the local significance. The paper would argue that the symbolic landscape of auspiciousness in Taipei is as a matter of fact of neo-liberal banality at the expense of local history and culture.

PROBLEMS ATTACHED TO THE PLACE NAMES SELECTION AND STANDARDIZATION IN PREPARING THE THEMATIC MAP OF LATGALE

Author: *Zane Cekula**, Latvian Geospatial Information Agency; Rezekne Higher Education Institution, Institute of Regionalistics, Latvia

Keywords: geographical education, Latvia, map, place names, region

Abstract: In order to give people a possibility to learn more about the history and culture of Latgale the map "Ar Latgolu sirdi" ("With Latgale in the heart") was published by the Latvian Geospatial Information Agency in 2014. This is the first thematic map of Latgale on which it is possible to see the historical borders of Latgale together with the administrative-territorial division and borders of the Planning region of Latgale used since 2006. The map gives information about 100 significant persons who have promoted Latgalian language, history and culture. Places where those persons were born are marked with numbers on the map. A short piece of information about each person is given.

All texts and place names on the map are written in Latgalian. However, some place names have changed over time. For example, the town name Jākubpiļs was used in written sources before the Second World War. Today, the spelling form Jēkabpiļs is mostly used – the place name which is closer to the name in standard Latvian language Jēkabpils. In many cases place names have several variants because of dialectal differences. It is important to find the earliest attested spellings of the place names in question as well as to know the local usage of them. Various problems attached to the names selection and standardization will be further discussed.

REPRÉSENTATION DE LA PEUR PAR LES TOPONYMES DU QUÉBEC

Author: *Isaeva Ekaterina**, Russian State University for Humanities, Russia

Keywords: imaginaires ruraux, place names

Abstract: Les noms de lieux sont les procédés de la langue qui définissent par excellence les objets géographiques, en décrivant et en représentant la terre d'un pays. L'analyse linguistique et culturelle de l'image de la peur verbalisée par certains noms de lieux du rural du Québec se fera à la base des données fournies par la Commission de toponymie du Québec (2012). Les noms de lieux ou les toponymes (unités toponymiques): hydronymes (noms des cours d'eau), dromonymes (noms des voies de communication), oronymes (noms du relief haut) et autres ayant une charge culturelle négative furent analysés du point de vue de leurs attributs de la « peur » établis à la base des jugements de valeur. Une attention particulière est prêtée à la description des noms de lieux de la campagne québécoise d'aujourd'hui qui ont les définitions directes de la « peur » représentée par les mots: peur (n f); mort (n f); effrayant (adj); dangereux (adj); maudit (adj) et autres. Au cours de la présentation seront analysés également les noms de lieux « dangereux » de la campagne québécoise qui comprennent en tant que deuxième composante: Mâchoire du Diable, Lac de la (Région: Côte-Nord); Loup-Garou, chemin du (Région: Lanaudière); Manitou Nord-Ouest, Rivière (Région: Côte-Nord); Massacre, Île du (Région: Bas-Saint-Laurent); Tremblant, Mont (Région: Les Laurentides); Pleureuse, Roche (Région: Saguenay-Lac-Saint-Jean) etc.

PLACE-NAMES AND FOREST VEGETATION IN TUSCANY (ITALY).

Authors: *Federica Frondizi**, Italy; *Laura Cassi*, University of Florence, Italy; *Bruno Foggi*, Dept. BIO, University of Florence, Italy; *Luca Ongaro*, IAO Istituto Agronomico per l'Oltremare Florence, Italy; *M. Adele Signorini*, Dept. BIO University of Florence, Italy

Keywords: forest vegetation, GIS mapping, Italy, place names

Abstract: Tuscan toponyms and their relations with forest vegetation have been recently investigated according to the following methods. Main forest species growing in Tuscany were selected and referred to expressly defined topo-species (corresponding either to botanical species or to groups of species), on the basis of their vernacular names. Tuscan toponyms were related to topo-species thanks to an expressly developed computer program. Each toponym was located by a GIS software. Distribution maps of toponyms were generated and compared with actual Tuscan forest vegetation, also revealing some interesting inconsistencies. The results of this survey and the original investigation methods followed were compared to a previous study on the same subject carried out about forty years ago and the resulting differences were critically discussed.

P52 TOURISM, GLOBALIZATION AND CULTURE

Organizers: *Carolin Funck, Dieter K Müller*

Location: Room B

SLOT1

Chairs: *Carolin Funck, Dieter K Müller*

Schedule: Monday, 31 August, 13:00–14:45

CULTURAL TOURISM ALONG SAINT MARTIN OF TOURS ROUTE. THE CASE OF PAVIA

Authors: *Raffaella Afferni**, Disum - Geolat - Università del Piemonte Orientale, Italy; *Carla Ferrario*

Keywords: cultural tourism, European Cultural Route, Pavia, Saint Martin of Tours Route

Abstract: Between the end of the first millennium and the beginning of the second, the practice of pilgrimage took on increasing importance and Via Francigena, Camino de Santiago and other routes became channels of communication for the realization of the cultural unit that characterized Europe in the Middle Ages.

Although in recent centuries routes to sacred sites begun to lessen in their importance, due to the advanced secularization of time that remodelled lifestyle patterns, visions and perspectives, in the last few decades the changes taking place in the tourist sector have given new models of holiday and people rediscover spiritual historical and cultural meanings.

From 1987 the EU programme “Crossroads of Europe (COE)” listed 29 cultural itineraries and the Council of Europe stated that there has been a significant growth in religious tourism in recent years and often pilgrims travel along specific routes to visit a number of shrines or even to complete lengthy itineraries.

The aim of our paper is to contribute to the analysis of the methods for promoting tourism along European Cultural Routes. In particular, the study will focus on a specific religious itinerary, the Saint Martin of Tours Route, and territory, the North-Italian area around Pavia (40 km south from Expo Milan 2015 site). The city was recognized in 2012 by European Commission as an example of Crossroads in cultural and religious routes and attend, this year, the presidency of the European Cultural Route of Saint Martin of Tours.

DECENTRALIZATION OF TOURISM WITHIN THE CHOSEN CAPITALS OF CENTRAL EUROPE – A COMPARATIVE ANALYSIS

Author: *Denis Cerić**, Institute of Geography and Spatial Organization – Polish Academy of Sciences, Poland

Keywords: loyalty, repeat visitors, travel patterns

Abstract: Majority of beds in accommodation establishments of urban areas are localized in central parts of the cities, while this phenomenon is even more evident in the cities of Central Europe. However, the trend of decentralization of offered beds within the cities’ boundaries is observed, and various theoretical models which explain the development of tourism concentration in urban areas are introduced. The research has been done in order to confirm this process and register its dynamics in chosen capitals of Central Europe: Bratislava, Budapest, Prague and Warsaw, between 2005 and 2013. The analysis of change in share of offered tourist beds, overnight stays, as well of change of Tourism Function Indexes and Augmented Tourism Density Ratios by administrative districts of mentioned cities is done and the results are brought into correlation. The overall result of the comparative analysis shows that the largest increasing change has been recorded in districts localized on the outskirts of the capitals between 2005 and 2013, and therefore this result supports the main hypothesis which stresses the larger tourism dynamics in peripheries of the Central European capitals, than the one happening in central districts. Besides comparative analysis of changes in provision and use of accommodation facilities by mentioned capitals’ districts, in this paper author tries to give an explanation why registered process of decentralization have different dynamics in researched capitals.

TRANSPORT ACCESSIBILITY OF NORTHERN TRANSYLVANIA – A TOURISM PERSPECTIVE

Authors: *Lujza Tünde Cozma**, UBB, Romania; *Csongor Máthé*, Babes-Bolyai University, Faculty of Geography, Romania

Keywords: mobility, road transport accessibility, tourism activity, tourist flow

Abstract: Accessibility studies have become a fashionable research theme even for tourism studies, because it has been proved that accessibility is a major factor in tourism development. Tourism destinations with great potential will stay underdeveloped unless good accessibility is provided. From the point of view of tourists, good accessibility of a destination means that the destination can be reached and explored, quickly, cheaply, safely and comfortably. Although accessibility is a very complex notion, where besides the transport component, spatial, temporal and personal components also play an important role, in the current study the authors placed a great emphasis on the transport component of accessibility. This is due to the fact that there is a strong and complex relationship between transport options and tourism activity. Transport plays an integral role in tourist flows, including locomotion from origin to destination, from one destination to another and also within a destination. Improvement of accessibility of tourist attractions, sites, localities and entire destinations is a major goal in regional development plans and strategies, however substantiating studies of a tourism perspective have not yet been done for North-West development region. Therefore, the aims of this study are to examine the accessibility of the region in general and of selected tourism centres and different tourist interest points (attractions)

in particular. The study also analyses the road accessibility of airports, which is crucial in terms of international incoming tourist flow. In our research, we relied on the Open Street Map spatial database, and professional GIS software (ESRI ArcGIS 10) for creating maps and conducting spatial analysis. The study brings novel results for the accessibility issues regarding the North-West development region of Romania. The obtained results show a strong linkage between transport infrastructure and spatial pattern of tourist activities.

THE SUSTAINABLE ATTRACTIVITY OF LANDSCAPES. TOOLS FOR SELF-REPRESENTATION AND SHARED TOURISM DEVELOPMENT IN RURAL AREAS

Authors: *Giuseppe Di Felice**, Università degli Studi del Molise - Dipartimento di Bioscienze e Territorio, Italy; *Diana Ciliberti, Monica Meini*, Italy

Keywords: imaginaires ruraux, innovative tourism product development, landscapes, perception, rural areas, territorial consciousness

Abstract: Rural areas are places of nature, traditions and roots, but also places of modernity with economic and social contradictions, animated by a continuous interchange of resources, materials, people with urban areas. For some time the Italian countryside has been showing contradictory tendencies ranging from a growing disinterest in the land with the exodus to urban areas to opposite phenomena such as large-scale land exploitation for industrial and commercial food production. Urbanization and globalization processes have then strengthened the need for authentic life and wilderness, driving urban residents to new explorations of the countryside, moved by the attractiveness of rural landscapes communicated through more and more stereotyped images and aesthetic values, while on the other hand rural dwellers have come to perceive their landscapes as un-aesthetic, or even anaesthetic.

The aim of the paper is to deepen the relationship between local communities and their landscapes and analyze the landscape perception on the part of those who live the countryside every day in comparison with visitors and temporary populations, looking for a renewal of social interaction, as well as innovative tools and methods for collective recognition. The results of an empirical study will be discussed, aiming to acquire information on the landscape perception by tourists and different categories of residents, with the intention of bringing out - beyond the different views - some common representations on which shared tourism development paths may be pursued.

THE ROLE OF VOLUNTEERS IN THE MANAGEMENT OF TOURISM SPACES AND EXPERIENCE: EXAMPLES FROM GERMANY AND JAPAN

Author: *Carolyn Funck**, Hiroshima University, Japan

Keywords: Germany, Japan, tourism space, volunteer tourism

Abstract: While volunteer tourism has received attention in recent years, the fact that volunteers play an important role in the management and creation of tourism spaces as well as in the experiences offered to tourists is less well researched. However, examples from Germany and Japan, both highly developed tourism markets, show that volunteers are indispensable especially in destinations based on natural or cultural tourist resources. National parks in Germany rely on long-term volunteers not only for observation and conservation of their natural resources, but also for interpretation and guide activities for tourists. In Japan, park volunteers fulfill basic tasks like trail maintenance and volunteers also guide tourists in historic townscapes or help in cultural events. In many cases, managing authorities have to rely on volunteers mainly for financial reasons, because the income from tourism is not reinvested in the management of tourist resources.

This research is based on interviews with volunteers and national park management in Germany and questionnaires and interviews with volunteers in several locations in Japan. It examines the benefits and problems that arise from the systematic reliance on volunteers from the point of view of volunteers, tourists and destinations. It will contribute to the discussion of volunteer tourism by clarifying the role of volunteers in the management of tourism spaces and experiences and by considering what kind of tourism experience the volunteers themselves can gain.

UNFOLDING VISITORS' MULTIPLE PERCEPTIONS OF THE TOURISM LANDSCAPE OF LINDOS (RHODES, GREECE)

Author: *Chrysafina Geronta**, University of Padova, Italy

Keywords: cultural heritage, field survey, landscape, perception, tourism

Abstract: Historical distinctiveness has frequently been considered as a special attribute increasing cultural landscape attractiveness (De Vries et.al, 2007) and therefore, heritage sites have selectively been promoted as exceptional "must-see" places at the expense of more ordinary places (Castiglioni, 2007). Besides the promoted image of heritage sites, a question remaining uncertain is related to the way the acknowledged heritage value of a tourism landscape, often merely attributed to its tangible characteristics; contributes to the visitors' on-site formulated evaluative perception, as well as the way the latter influences the outcome of the interaction between the visitors and the site.

On the basis of the above reflection, this paper initially aims at illustrating a theoretical framework deriving from a literature review within the fields of tourism and landscape research and which constituted the basis for structuring a questionnaire based survey, carried out in summer 2014, addressed to independent international visitors of the historical area of Lindos on the island of Rhodes.

The survey aimed to explore how do individual characteristics of visitors (socio-demographics, socio-psychological motivations, and travel behavior) influence their on-site cognitive and affective evaluation (Baloglu, 2000, Beerli et.al, 2004) and how the latter affects their attitudes (satisfaction, willingness to return, desirable future landscape changes).

Consequently, the presentation of the survey results unfolds the multiple perceptions and spectrum of recognized as well as neglected values of the tourism landscape of Lindos, opening new research questions and contributing to further reflections on an eventual necessity of broadening the meaning of heritage in the context of tourism landscapes.

ROLE OF BUILT HERITAGE, LOCAL IDENTITY, AND TOURISM FOR SUSTAINABLE DEVELOPMENT IN ROMANIA. EMPIRICAL RESEARCH RESULTS OF A ROMANIAN-AUSTRIAN PROJECT

Authors: *Xenia Kinga Havadi Nagy**, Faculty for Geography, Babes-Bolyai University, Romania; *Ilovan Oana-Ramona*

Keywords: built heritage, local identity, sustainable development, tourism

Abstract: During the last 25 years, Romania has undergone a process of development coping with changing internal and especially external social and economic factors related to globalization, migration, and commodification of culture and heritage, all these in a strive to survive or to become competitive. In this framework, two research teams from one institution in Romania (Faculty of Geography of the Babes-Bolyai University in Cluj-Napoca) and one from Austria (Institut für Stadt- und Regionalforschung of the Österreichische Akademie der Wissenschaften) wrote, won, and implemented a research project looking for an answer to sustainable development in three successful tourism locations in Romania: Viscri (Deutsch-Weisskirch, a typical Saxon village), Rimetea (Torockó, a typical Hungarian village) and Marginea (a typical Romanian one). We present the results of the fieldwork during the first year of the project (2014) focusing on Romanian settlements. The second year focuses on a series of Austrian settlements (fieldwork on these is scheduled for the summer of 2015). In this paper we used the results of interviews and focus groups with common locals, entrepreneurs, NGO representatives, and members of the local administration to highlight the relationship between leadership, successful tourism, culture and heritage commodification and protection, role of local identity and future sustainable development perspectives. The question of transferring these development models to other settlements in Romania or elsewhere was also answered.

INVISIBLE TOURISTS - HIDDEN DESTINATIONS. THE PATH OF THE GREAT WAR IN THE ALPINE REGION.

Authors: *Anna Irimiás**, Kodolányi János University of Applied Sciences, Hungary; *Gábor Michalkó*, Geographical Institute, HAS, Hungary

Keywords: experience, landscapes, tourist movement

Abstract: In the 20th century the Great War was the first global conflict. The war ended in the dissolution of Austria-Hungary and in the birth of the so-called national states. These past events deeply signed the historical memory of the nations involved in the conflict. In 2014, the Centenary of the outbreak of the First World War (WWI) was remembered all around Europe at war memorials, former front lines, war heritage sites and in themed museums. Although very little is known about tourism and tourists' experiences at war heritage sites. In the present paper the tourism geographical aspects of military landscape in the former Austro-Hungarian Monarchy's Italian territory (South-Tyrol) are analysed. The analysed destinations are hidden and are difficult to access since trenches and fortifications were constructed in high altitudes in the Alps. The focus of the paper is centered on invisible tourists whose arrival is not registered in any official statistics although they constitute an important tourism demand in the region. The research was carried out with several field visits in 2015 in Trentino-Alto Adige. In more, questionnaire surveys were employed to detect tourists' experiences at war heritage sites. The paper discusses the concept of invisible tourism at hidden places and its tourism geographical implications.

The research was financed by Magyar Állami Eötvös scholarship and by OTKA.

THE MULTIFUNCTIONAL ROLE OF CULTURE IN THE DEVELOPMENT OF A DISADVANTAGED VILLAGE - CASE STUDY OF BÓDVALENKE FRESCO VILLAGE

Author: *Márta Juszti**, Budapest Business School, Hungary

Keywords: cultural tourism

Abstract: Bódvalenke is a multiply disadvantaged hidden village in North-Eastern Hungary. 95% of the inhabitants are Roma people with no hope or work opportunities. A project has been introduced to improve this situation, which objective was to prove that a Roma village is able to stand on its own feet with the help of contemporary Roma art: noted international and Hungarian Roma painters were invited to paint murals on the external walls of the houses. This presentation focuses on examining whether this village with its unique, cultural (notably high-cultural) features, and with the culture of the local ethnic group is able to join tourism industry. Furthermore, those fields will be also mentioned, in which the significance of culture might play an important role in achieving improvement; together with those where the general positive impacts of tourism are represented, such as at economic, social, cultural and environmental level. The synthesised results of the examined fields will show those ways which trace developmental paths for the village and its tourism.

THEMATIC TOURIST ROUTES IN THE TOURISM OFFER OF HUNGARY

Authors: *Ildikó Kovács**, University of Szeged, Department of Economic and Social Geography, Hungary; *Zita Martyn*, University of Szeged, Department of Economic and Social Geography, Hungary

Keywords: content analysis, cultural tourism, marketing, thematic routes

Abstract: The thematic routes present the attractions of an area joint to a given topic, complemented by other services. The routes can play various roles in the areas. On the one hand, these can contribute to the development of the area by attracting visitors, on the other hand with the introduction of cultural sights act the part of protecting cultural values and strengthening the identity as well. In addition, these routes help to popularize the less known attractions, too. The thematic routes are common in Western Europe (eg. Great Britain, Germany, France), which are based on different themes. In Hungary the thematic routes appeared and spread in the last 15 years and can be also found a wide variety of themes, such as castle routes, folk art-, historical- and gastronomic routes. But besides developing the roads the marketing tools are also important, because these contributes to inform the visitors about the existence and the main characteristics of the route. During the research we made content analysis of different regional Hungarian tourist brochures and (tourism) development plans. We analyzed how these routes appear in the publications and which kind of role these play in the tourism offer. The aim of this study is to provide a comprehensive picture about the appearance and role of thematic routes in the tourism offer of Hungary.

TOURIST MOVEMENT OF THE THREE LARGEST INTERNATIONAL PILGRIMAGE CENTRES OF POLAND. TEMPORAL AND SPATIAL CHANGES OF SACRED SPACES

Authors: *Justyna Liro**, Jagiellonian University, Poland; *Elżbieta Bilska-Wodecka*, Jagiellonian University, Institute of Geography and Spatial Management, Poland; *Izabela Sołjan*, Jagiellonian University, Institute of Geography and Spatial Management, Poland

Keywords: pilgrimage centre, religious tourism, tourist movement

Abstract: In Poland, there are more than 800 Roman Catholic sanctuaries, which are destinations of large scale tourist movement of religious nature. Three largest pilgrimage centres of tourist movement of an international character were the object of the study. The Sanctuary of Our Lady of Częstochowa at Jasna Góra dates back to the 14th century. It is the most important pilgrimage centre in Poland. Every year, the sanctuary is visited by nearly 4 million people from over 80 countries. Walking pilgrimages, attended annually by nearly 200,000 people, are unique in the world. The Sanctuary of Divine Mercy in Łagiewniki, dating back to the late 19th century, is the most international pilgrimage centre in Poland. It is annually visited by nearly two million people from over 100 countries. In 2012, John Paul II Centre together with St. John Paul II Sanctuary were located nearby. This sacred spaces is a unique religious complex of a high growth potential. It is going to host the World Youth Day in 2016. The Sanctuary of Our Lady of Licheń Sary, dating back to the 15th century, is visited each year by about 1 million people. Currently, the sanctuary is a developed pilgrimage complex, performing many functions for its visitors. The location and development of the sanctuary's area significantly affected the functional structure surrounding the sacred zone. The paper aims to present the volume and characteristics of the tourist movement to the three largest international sanctuaries in Poland. The paper also takes into account temporal and spatial changes to the sacred spaces of these sanctuaries, and identifies the factors and conditions of these changes with particular emphasis put on tourism. The prospects for the development of tourist movement and the areas of the sacred spaces of these religious centres in Poland have also been highlighted.

SAMI TOURISM AT THE CROSSROAD: GLOBALIZATION AS CHALLENGE FOR BUSINESS, ENVIRONMENT AND CULTURE IN SWEDISH SAPMI

Author: *Dieter K Müller**, Umeå University, Sweden

Keywords: entrepreneurship, land use, Sami, Sweden

Abstract: Tourism development is often seen as possibility to balance decline in indigenous industries even in Northern Europe. Hence tourism is considered a way to sustain culture and livelihood, but also as a way to stay within frequently otherwise economically contested peripheral regions. This is also applicable for the Sami, the indigenous population of the Nordic countries. Still in the scientific literature tourism solutions for peripheral areas are debated and questioned owing to reasons related to, for example, power, knowledge and location. Recent global interest in Northern resources like minerals, timber and wind power are competing land-uses not only for Sami reindeer herding, but also for Sami tourism. Against this background the purpose of this paper is to analyze how Sami tourism entrepreneurs assess these external challenges also in comparison with other requirements related to the business of tourism. The paper is based on a comprehensive phone survey among all Sami tourism entrepreneurs in Sweden during 2012. Results indicate that Sami entrepreneurs are highly concerned regarding the impact of increasing exploitation of northern resources. However, it is not only industry that creates problems. Even state policies on predators are seen as threat, which indicates that Sami entrepreneurs perceive business and culture as two sides of the same coin. In contrast business-related challenges are seen as manageable.

TOURISM IN THE GLOBAL COUNTRYSIDE: A RELATIONAL APPROACH TO RURAL TOURISM

Author: *Solene Prince**, Mid-Sweden University, Sweden

Keywords: globalization, rural tourism

Abstract: The notion of a global countryside appeared in rural geography to conceptualize the uneven impacts of globalization on rural spaces, where the responses and adaptations of local actors give a place its unique character. I Through the case of the Arts and Crafts Association Bornholm in Denmark, I explore the array of dynamics and complexities which engulf rural individuals in extra-local discourses and practices. I primarily conducted the study through 19 interviews with members of the association. I argue that these artists' search for customers and spectators leads them to form various professional networks and work on strategies, which allow them to benefit from the short but intensive tourist season. The line is then blurred between lifestyle aspirations, career ambitions and livelihood necessities in the craft artists' space, but also more specifically between the commercial, professional and authentic nature of the space they present to tourists. These artists consequently create for themselves a hybrid living space, strategized and redefined in relation to the complexities of residing in a countryside global in nature. The dynamics of the complex systems rural people live in are argued to be vital elements for understanding the emergence of rural tourism.

SUBURBAN AREAS IN THE SOUTHERN HINTERLAND OF PRAGUE – TRANSFORMATION OF SECOND HOME FUNCTION

Authors: *Jiří Vágner**, Charles University in Prague, Faculty of Science, Dep. of Social Geography and Regional Development, Czech Republic; *Dana Fialová*, Charles University, Czech Republic; *Tereza Kůsová*

Abstract: Suburban areas in CEE countries have been changing their physical and social structure in the period of post-communist transformation. The delayed suburbanization process was partly substituted with second home phenomenon in the totalitarian era. Second home research in the last two decades has had a strong focus on rural development and planning (Gallent and Tewdwr-Jones 2000) and recreational mobility (Hall, Müller 2004). Second homes phenomenon has been considered as an element of the deurbanisation processes with the blurring differences between primary (permanent), seasonal, secondary dwelling and place of work (Champion 2001; Flognfeldt 2004; Övervåg 2011). Less attention has been paid to second homes in suburbanized areas, especially in CEE countries (Brode and Nefedova 2008; Letmaa et al. 2012).

In our research the role of second homes in the period of post-communist transformation has been surveyed in the southern hinterland of Prague, following our surveys from the 1990s (Fialová 1999). We use continual quantitative data from cadastre office as well as qualitative data from field and questionnaire surveys. Most second homes have been converted and substituted for residential function. Besides changes in physical structures, significant changes in community life were revealed. The processes of co-operation and co-existence have been enriched by stronger competition in the neighbourhoods (old natives vs. newcomers vs. second home users) with different needs and ideas about space use (Ap 1990; Fialová 2009). The different views are also seen from the private sector (developers) and local administration actors.

EDUCATIONAL TRAVEL WITHIN THE FRAMEWORK OF INVISIBLE TOURISM – A GEOGRAPHICAL ANALYSIS

Authors: *Tamara Rátz**, Kodolányi János University of Applied Sciences, Hungary; *Gábor Michalkó*, Geographical Institute, HAS, Hungary

Keywords: educational travel, Hungary, invisible tourism

Abstract: Educational travel is a wide concept including both formal and informal learning activities within the framework of tourism. It generally combines a meaningful learning experience with leisure, and through offering a personal experience of places and encounters, it provides opportunities for participants to explore specific issues in ways that would be usually impossible in the traditional educational environments.

In Hungary, both primary and secondary schools organise annual study trips for students. The main aim of these excursions is to familiarise the students with the most important places and sights of the country, but such trips also include course-related activities and contribute to community-building. In many cases, school trips play a key role in the students' socio-psychological development as future tourism consumers, determined by a variety of factors such as their family background, general participation in tourism activities, individual involvement, and the quality and programmes of the school trips. The majority of these trips take place within the sphere of invisible tourism, although certain elements may ensure a link to the established tourism system.

The proposed paper is based on a questionnaire survey carried out in Hungary during 2014 among secondary school students and teachers (sample size: 2000 and 300, respectively). The research aimed to understand the geographical characteristics of the annual study trips as well as their perceived significance in students' cultural and intellectual development. In addition, we also aimed to explore teachers' attitudes and perceptions concerning the benefits of study trips, as well as the factors affecting the destination- and activity choice-processes.

THE RISKS OF SUCCESS: MASS TOURISM IN BARCELONA

Authors: *Dolores Sánchez-Aguilera**, Universitat de Barcelona, Spain; *Jaume Font-Garolera*, University of Barcelona, Spain

Keywords: tourist flow, urban tourism

Abstract: As a tourist destination, Barcelona has become over the last two decades in a European reference and a model of success. In the city, tourism has become a strategic and growing activity. Therefore, Barcelona is an established international destination because of its natural surroundings, its opening to the sea, its monument heritage, its rich cultural life and some intangible values such as cosmopolitanism, modernity or lifestyle. However, tourist flows in Barcelona have some negative effects. The concentration of tourists in certain iconic areas of the city (Ramblas, Plaza Catalunya, Sagrada Familia Church surroundings...) and the proliferation of unregulated tourist apartments are some obvious facts and are present in the perception of Barcelona's citizens. Also the impact of tourism is tangible also in complementary services (restaurants, bars, touristic routes) and in retail trade and other side effects such as noise, dirt and insecurity. In this context, nowadays there is a heated debate between supporters of betting on tourism as a source of income for the city and opponents of tourism, upset with the negative effects and loss of identity of the city. The aim of this paper is to present the features of Barcelona as a complex tourist destination and review the different readings that characterize the situation of this activity today.

ROYAL ROUTE IN PRAGUE – STILL GENUINE TOURISM?

Authors: *Jiří Vágner**, Charles University in Prague, Faculty of Science, Dep. of Social Geography and Regional Development, Czech Republic; *Dana Fialová*, Charles University, Czech Republic; *Veronika Dumbrovská*

Keywords: cultural tourism

Abstract: Prague and its historical core is the most attractive and the most visited tourist destination not only in Czechia but, also due to Prague position on UNESCO World Heritage list, belongs to the most significant urban and culture tourism destinations in (Central) Europe. An enormous concentration of tourists and visitors on the Royal Route, the connecting line between historical quarters and Prague Castle via the unique Charles Bridge, raised impacts of touristisation, space congestion and commodification which endanger genius loci and genuineness of the location. A great variety of different care for keeping the authenticity is observed on the 2,5 km route. The authenticity is surveyed with analyses of the offer of souvenirs. A change in the structure of the offered goods reflecting prevailing demand of tourists was examined during repeated surveys. There is a profound difference in the respect to the genuineness in the both positive and negative directions. The essential threats source from ultraliberal market economy and lack of regulative tools, necessary for the conservation of the cultural heritage based on the unique architecture and urban structure of the historical core of the city of Prague.

THE CULTURAL HERITAGE-BASED MODEL FOR TOURISM DEVELOPMENT IN ALBARRACÍN (TERUEL, SPAIN).

Authors: *Claudia Yubero Bernabé**, Universidad Complutense de Madrid, Spain; *María García-Hernández*, Universidad Complutense de Madrid, Spain

Keywords: cultural heritage, rural development, territorial resource, territorial resource, tourism carrying capacity

Abstract: In a globalized context, also rural areas undergo profound competition as tourism destinations. Diverse paths leading to the enhancement of local culture and heritage then materialize. Also, acknowledged as a key factor triggering endogenous development, tourism is widely transferred within policy instruments of different nature. Thus, addressing the problems stemming from the development of tourism in these areas is of high interest in order to tackle rural development and territorial cohesion.

Albarracín is located in the northeast Spain and has historically suffered from depopulation, agrarian crisis and unemployment. Since the 90s, different instruments have converged and managed to turn its cultural heritage in a territorial asset of prime importance and so, provoking an exceptional burst of cultural activity and tourism. Today, the place has become a reference at a national-scale. However, the recognized success of the model is compromised by the dynamics of seasonal saturation particularly fragile in rural areas.

The policy approach enables us to investigate about local opportunities, constraints and results of the instruments implementation, as well as dynamics of divergence and convergence compared to other areas. The configuration of the development model based on the cultural resource will be characterized, focusing particularly on the emergence and action of the Santa Maria Foundation. Thanks to a mapping survey, its effects are systematized in three areas: quality offer, cultural revitalization and growing outbreak of private initiatives. The study highlights the importance of cooperation between agents to generate positive synergies for differentiation, innovation and creation of high added-value products.

Organizers: *Johanna Holvándus, Kadri Leetmaa*

Location: Room L

SLOT1

Chair: *Kadri Leetmaa* Discussant: *Ludek Sykora*

Schedule: Wednesday, 2 September, 10:45–12:30

UPWARD TRAJECTORIES IN HUNGARIAN CITIES IN THE CONTEXT OF GENTRIFICATION

Authors: *Eszter Berényi B.**, Geographical Institute, Research Centre for Astronomy and Earth Sciences of the HAS, Hungary; *Zoltan Kovacs*, University of Szeged and HAS, Hungary

Keywords: gentrification, post-socialist city, residential mobility, urban regeneration

Abstract: After 1989-90 the evolving political and economic transformation resulted in robust shifts in social stratification and residential mobility in post-socialist cities. At the same time the concept of gentrification has become extensively used in the literature in the context of neighbourhood renewal processes although the exact meanings of the term and its social effects have not always been sufficiently clarified. This paper builds on empirical research findings from upgrading neighbourhoods in Budapest and four major cities of Hungary (Miskolc, Debrecen, Szeged, Pécs). We focus on the main factors of neighbourhood change, the social effects of physical upgrading including population displacement, the changing level of social mix and social cohesion. The role of local urban policies and government arrangements in the upgrading processes is also analysed. Based on our empirical findings we fit the observed processes into a wider conceptual framework and revisit the original concept of gentrification and its mutations under the Hungarian conditions.

RESIDENTIAL MOBILITY PROCESSES IN A DIVERSIFIED URBAN AREA
OF BUDAPEST, HUNGARY

Authors: *Szabolcs Fabula**, Department of Economic and Social Geography, University of Szeged, Hungary; *Lajos Boros*, University of Szeged, Hungary; *Dániel Horváth*; *Zoltan Kovacs*, University of Szeged and HAS, Hungary

Keywords: housing, post-socialist city, residential mobility

Abstract: Within urban studies there is a growing literature on the connections between neighbourhood characteristics and residential mobility. Recent research in Western European cities demonstrated a notable correspondence between the population turnover and the physical structure or social composition – especially socio-economic status and ethnicity – of an urban area. Nevertheless, it has rarely taken into account how urban social diversity in its complexity (not only in demographic, socio-economic and ethnic terms, but regarding e.g. lifestyles, values and identities) influences households' decisions and relocation dynamics.

In our paper we investigate the connection between urban diversity and residential mobility in Budapest, Hungary. Our case study area is the 8th district (Józsefváros) which is one of the most diverse and dynamic parts of the city. Our main goal is to discover the motives and reasons behind household moves into this area. Special attention will be paid to diversity as a possible pull-factor. The study is based on empirical evidence gathered with quantitative as well as qualitative methods. Firstly, using Population Census data from 2001 and 2011, population and housing stock composition and residential mobility trends will be analysed. Secondly, 50 interviews have been conducted to shed light on housing choices of local residents. We can conclude our study by emphasising that the socio-cultural diversity of the neighbourhood is perceived by many respondents as an asset, but it does not play a significant role in the immigration to the area.

This paper is based on ongoing research under the EU FP7 project DIVERCITIES.

THE VIEWS OF NEIGHBOURHOOD ASSOCIATIONS ON COLLABORATIVE SPATIAL
PLANNING IN TALLINN

Authors: *Johanna Holvándus**, University of Tartu, Department of Geography, Estonia; *Kadri Leetmaa*, University of Tartu, Estonia

Abstract: The keyword for cities of the 21st century is without a doubt diversity. To comprehend this mixture of differences new practices in planning are opted to reduce disadvantage and inequality, create places of encounter, and recognise possible stakeholders. During the last two decades certain restructuring of boundaries between public sector, market and civil society can be detected resulting in growing cooperation between the mentioned sectors: a clear shift from government towards governance is notable. Through collaboration citizens enforce their social and political citizenship. The Estonian planning system still represents a mixture of Soviet top-down planning and collaborative principles opted from Western Europe. As in other European cities so in Tallinn, the capital of Estonia, neighbourhood associations have activated and started to grow a strong accountable voice of opinion when it comes to spatial planning. This article analyses the contribution of neighbourhood associations to spatial planning through holistic-theoretical approach providing insight to current collaborative planning situation in Tallinn. The empirical data implies to certain aspects or even gaps in collaboration suggesting a need for overall shift of thought towards more open and inclusive planning practice. The results also indicate that the obstacles for collaboration lie in the bureaucratic structures as well as in lack of competence to carry constructive discussion. The paper is based on ongoing work under the EU-funded FP7 project DIVERCITIES (2013–2017). Qualitative data analysis of semi-structured interviews followed the principles of directed content analysis.

HOW MANY WAYS OF CHANGING BROWNFIELD TO RESIDENTIAL NEIGHBORHOOD EXIST? – EXAMPLES FROM THE CAPITAL OF HUNGARY

Author: *Gábor Tolnai**, Eötvös Loránd University, Hungary

Abstract: As in numerous other post-socialist cities in CEE countries, former industrial and traffic zones constitute significant parts of urban territory of Budapest. Due to the remarkable decrease of industrial production during the transition and the uneven development in the new market-based capitalist system, recent condition of these zones is absolutely diverse. One way of converting the disadvantageous sites is creating residential neighbourhoods. Depending on the spontaneity, the degree of financial or political support, the fluctuation of housing market, and the locality, success can vary noticeably. This paper gives some examples from Budapest: the studied zones were rather similar at the beginning of the 1990s, and some of the plans for urban renewal were also more or less similar, nevertheless the results(?) are divergent.

Encouraged by the call for papers of this session, the paper also presents a probably less utilised research method: the GIS- & photogrammetry-based analysis of brownfield zones. Aerial photos let us explore the static morphological and environmental condition of these sites, while GIS gives the opportunity to analyse the dynamics of changing.

IS THERE REURBANIZATION IN BELGRADE? – EVIDENCE AND IMPLICATIONS

Author: *Jovana Todoric**, Geographical Institute “Jovan Cvijic” of the Serbian Academy of Sciences and Arts, Serbia

Keywords: reurbanization, inner city, residential preferences, urban lifestyle, Belgrade

Abstract: According to general model of urbanization process given by van den Berg and associates (1982), reurbanization comes as the last, fourth phase in the functional urban region (FUR) development. It occurs when the share of city core's population in the total FUR population increases again, while the total agglomeration population decreases. This moving to the city core can be also defined qualitatively, indicating a change in location-decisions of individuals and households. This moving is a reflection of contemporary socio-economic changes and the growing interest in urban lifestyle with easy access to cultural, entertaining, consumer and service functions in the urban core. Holders of this process are young, highly educated, employed and wealthy people, who live in small non-traditional household and whose values and priorities differ from those in suburban areas. Official statistics on migration in Belgrade region still can not record reurbanization – even pointing to the depopulation of the central city zone. Questionnaire survey was aimed to draw attention to the indicators of reurbanization that are harder to capture - perceptive, subjective, qualitative and individual attitudes of the population. This paper deals with a comparative analysis of quantitative indicators of the official statistics on the one hand and the survey results on the other hand. Residential preferences directed towards urban lifestyle, the motives for choosing the central zone as the ideal residential location and qualitative evaluation of housing space give prerogatives to identify and define the process. At the same time they are opposed to official statistical data. This paper aims to find the driving forces and the essence of the assumed reurbanization process in Belgrade.

SLOT2

Chair: *Johanna Holvandus* Discussant: *Lajos Boros*

Schedule: Wednesday, 2 September, 15:00–16:45

RURILITY OF THE DIFFERENT SUBURBAN SETTLEMENT TYPES IN THE RURAL-URBAN FRINGE OF GYŐR, HUNGARY

Authors: *Gábor László Vasárus**, University of Szeged, Department of Economic and Social Geography, Hungary; *Péter Bajmócy**, University of Szeged, Hungary

Keywords: conflicts, Hungarian settlement network, outskirts, suburbanization, urban-rural continuum

Abstract: Hungarian urbanization has some specific peculiarity, because of administrative traditions and special settlement network of Hungary. A municipality can be divided into two parts, an inner part (core, incorporated villages) and outskirts. The spatial structure of incorporated villages resulted in the phenomenon of the suburbanization within city limits. During this process, residents tend to change their living conditions to a more rural one without leaving the municipality. The outskirts are mostly remote-rural-like scattered or interim habitations within the administrative limits of a city or village but these are usually separated from main built-up areas. Areas of former villages attracted 21% of suburban movement outside of Budapest Agglomeration since 1990. This research aims to examine how it influenced local society and land use pattern in rural parts of the agglomerations.

Our method was a questionnaire involving 800 households and census of outskirts plots in the sample area of a middle-sized city in West Hungary. Most of the residents came from the city to rural milieu and their main motivations were low utility costs, gardening opportunities and slow lifestyle. A significant part of them is especially looking for remote-rural-like environment and community, however they want to stay close to the city. High proportion of migrants have low-income and disadvantages. The repeated expansion of modest houses resulted in a chaotic townscape that is creating conflicts within neighborhoods. Even villages, incorporated villages and outskirts are at the same distance from the city show significant differences in rurality, suburban motivations and society.

SUBURBANIZATION AND URBAN SPRAWL FROM A MICRO-PERSPECTIVE

Author: *János Balázs Kocsis**, Budapest University of Technology and Economics, Hungary

Abstract: Processes and dynamics related to recent phase of urban sprawl, such as suburbanisation of population, migration of economic activities to the outer urban areas, polycentric urban development and emergence of a network characteristic in metro-

politan regions profoundly altered the local societies of the Budapest agglomeration belt. Based on over seventy in-depth interviews with residents and decision-makers and a survey of 1,200 in the south-western section, the presentation will demonstrate how the local society transformed in consequence of the arrival of the migrants and economic activities, giving account on why people moved to the area, what the newcomers think of their new community, what the “original” residents think of the migrants and the changes, while it attempts at drawing generalised conclusions about this phase of suburbanization in East Central Europe.

SEGREGATION, ETHNIC ENCLAVE OR MULTICULTURAL NEIGHBOURHOOD? SPATIAL PATTERNS AND DAILY INTERACTION IN POST-SOCIALIST CITY

Authors: *Ludek Sykora**, Charles University in Prague, Czech Republic; *Tomáš Brabec*; *Klára Fiedlerová*; *Roman Matousek*, Charles University in Prague, Czech Republic

Keywords: ethnic enclave, multicultural neighbourhood, post-socialist city, segregation, social integration

Abstract: Since the beginning of millennium, Czech cities have been affected by a dramatic growth of immigration. Their concentration in particular neighbourhoods brought attention of media and politicians, constructing images of inter-ethnic conflicts and segregation. This paper focuses on Praha-Libuš, a neighbourhood in Czech capital with rapidly increasing presence of Vietnamese, which has been stimulated by the establishment of the largest Asian bazaar in post-socialist Europe. We build on two strands of research conducted in the neighbourhood. In the first pillar we focused on residential segregation using aggregated statistical data at sub-neighbourhood level, field research that mapped foreigner's residences in each property within the neighbourhoods, and investigation of actors and practices on residential property market. In the other research, we focused on social interaction between Vietnamese and majority. In particular, we investigated the experience of both majority and Vietnamese, and focused on tensions and conflicts as well as conviviality in everyday life specifically distinguishing between representations and discursive practices and material practices of economic, social and cultural interaction. Using the research results we discuss whether the concentration of Vietnamese immigrants in originally ethnically homogeneous neighbourhood results in ethnic residential segregation, formation of an ethnic enclave or emerging multicultural neighbourhood.

SPATIAL DEVELOPMENT AND PLANNING IN RUSSIAN DECLINING CITIES

Author: *Vera Efremova**, Moscow State University, Russia

Keywords: dwelling zone, industrial zone, population decline, residential zone, urban space

Abstract: Spatial development of Russian cities has changed over the last 25 years. Increased mobility, rise in socio-economic disparities in income and housing preferences, new principles of urban planning and governance have led to reconfiguration of spatial patterns developed in the previous period. This study reviews the changes in the spatial structure of Russian declining cities from the early 1990s, focusing on the location of the employment and journey to work patterns, the changing nature of housing and the patterns of residential differentiation. The research is based on the methods of visual analysis of cartographic materials and satellite images. The role of state and municipal authorities is examined through the analysis of planning documents. The majority of cities experiencing population decline have an industrial economic base. The suggested typology of urban morphology revisits the spatial relationships between industrial enterprises and residential areas. The changes in the nature of these functional areas consist of the reorientation of journey to work patterns, reduction of the role of an industrial zone as a pole of attraction. The opinion that population decline leads to the «shrinkage» of the urban space is not confirmed in Russian cities. Many cities have developed with a leading role of industry, when housing and social services have been financed by a residual principle. Nowadays the main trajectory of urban development for such cities is «filling this gap».

P54

CREATIVE AND INNOVATIVE SOLUTIONS FOR THE DEVELOPMENT OF URBAN AND RURAL AREAS

Organizer: *Tamás Egedy*

Location: Room G

SLOT1

IMPACTS OF CREATIVITY AND INNOVATION ON THE URBAN ECONOMY

Chair: *Tamás Egedy*

Schedule: Monday, 31 August, 17:15–19:00

INDEX OF SPATIAL AGGLOMERATION – A NEW THEORETICAL APPROACH

Authors: *Tomasz Kossowski**, Adam Mickiewicz University in Poznan, Poland; *Jan Hauke*, Adam Mickiewicz University in Poznań, Poland; *Katarzyna Kopczewska*

Keywords: spatial agglomeration, spatial firms distribution, spatial uniform distribution

Abstract: The aim of the paper is to evaluate the regions' coverage with the economic activity, what will measure the spatial agglomeration of firms. In the paper we build the spatial agglomeration index (SPAG), which is to determine to what extent the companies on the territory (e.g. in the region) are evenly distributed over space or follow spatial agglomeration process. It should be stressed that SPAG differs with the commonly used indicators of concentration, assessing the degree of saturation of a selected region with specific sector compared to the saturation in other regions, or specialization indicators, evaluating the saturation with a given industry compared to other industries saturation in the territory.

Current models of concentration and agglomeration are de facto the a-spatial models and in existing models this spatial distribution is neglected. They are based on the number of employees in a given area in a given sector. Therefore taking into account such aggregated data, we operate in the scale independent of space, of the actual firm location and of spatial distribution of companies over the territory. Measures of concentration and specialization are relative to other regions or other sectors. The SPAG is a proposal of measure which is without these deficiencies.

FACTORS DETERMINING PARTICIPATION OF WOMEN IN THE LABOUR MARKET OF THE CREATIVE SECTOR: THE CASE OF THE POZNAŃ METROPOLITAN REGION

Author: *Michał Męczyński**, Adam Mickiewicz University in Poznań, Poland

Keywords: creative sector, gender balance, labour market

Abstract: The growing rate of women's occupational activity is one of the most striking changes observed on the European labour market since the mid-1990s. Women have been increasingly engaged in professional activity and more frequently occupy high positions in their workplaces. However, a full gender balance has still not been reached regarding either the posts occupied or the wages. Moreover, the extent of the women participation in the labour market still varies across work sectors and between different member states within the EU. There are many factors responsible for the still-lower business activity of women and the gender segmentation of the labour market. The dual labour market theory posits that structural constraints pose a particularly important limitation for the success of capable women. According to Richard Florida, the creative sector, which often has non-material outcomes and does not rely on physical labour, offers particularly promising prospects for women. This sector is rapidly developing in the Central and Eastern Europe, providing a wide range of opportunities for self-development and new businesses, but research on the women's creative activity in this region is still very limited. In Poland, particularly in metropolitan areas such as the Poznań Metropolitan Region, there exist many opportunities, but also some specific limitations for the professional development of women working in the creative sector. This paper presents results of the research on the barriers that presently limit the women participation in the labour market of the creative sector.

AN EMERGING CREATIVE HUB VS COMMERCIAL GENTRIFICATION? – THE CASE OF THE JEWISH QUARTER IN BUDAPEST

Author: *Tamás Egedy**, Geographical Institute, RCAES HAS, Hungary

Keywords: commercial gentrification, creative cities, creative industries, Jewish quarter of Budapest

Abstract: The trajectories of creative city or creative quarter development can be both planned and/or organic, which means a deliberate policy of national or local governments or arising from grass-roots initiatives of creative practitioners and entrepreneurs, communities and civil organisations. There may be different stages of development and cities are always in flux so the creative process is a dynamic one and constantly evolving (for better or worse). However, there are many stable and common characteristics of creative districts including the existence of creative businesses and networks, the presence of artists and creative people, and the link to alternative lifestyles and sub-cultures. Many creative districts were originally some of the poorest and deprived in a city where rents were cheap and students, artists, ethnic minorities and alternative lifestyles could afford to live. As creative districts become more attractive and popular, gentrification often ensues, but this is an inevitable part of the transition process which needs to be managed carefully to avoid the erosion of what made the district appealing in the first place. The development of tourism may also be inevitable but there is the risk that these areas can turn into tourist enclaves and lose their appeal for creative people. In the paper current development trends taking place in the former Jewish quarter will be highlighted. The main question is whether this quarter could and will be function as an emerging creative hub within the city or it is only an other new site for commercial gentrification?

SANCTUARIES IN KRAKOW-ŁAGIEWNIKI (POLAND) – NEW CULTURAL AND RELIGIOUS CENTER

Authors: *Justyna Liro**, Jagiellonian University, Poland; *Elżbieta Bilska-Wodecka*, Jagiellonian University, Institute of Geography and Spatial Management, Poland; *Izabela Sołjan*, Jagiellonian University, Institute of Geography and Spatial Management, Poland

Keywords: Krakow, religious center, sanctuary, World Youth Day

Abstract: Krakow can boast a long tradition as a centre of cultural and religious tourism in Poland. In 2014 alone, the city was visited by nearly 9 million people. In recent years, the proportion of tourists visiting Krakow for religious purposes has been increasing. The Sanctuary of Divine Mercy in Krakow-Łagiewniki is visited by over 2 million people a year. In 2012, John Paul II Centre together with Sanctuary of St. John Paul II were located nearby. This comprehensive pilgrimage centre was established in unused, former industrial areas of the Solvay soda chemical plant. It was in this way that a neglected post-industrial area became one of tourist reception, and a place of important cultural and religious events. The religious centre consists of numerous religious facilities, also performing other functions, among others, cultural and educational ones. The pilgrimage centre in Krakow-Łagiewniki is an important subject in the development and promotion of the city's tourism, and its potential has been increasing rapidly. This paper aims to present temporal and spatial changes to the sacred spaces of these sanctuaries within the city of Krakow, and to indicate the factors and determinants of these changes. Reference was also made to the possibility of development of the area in the perspective of the cultural and religious event to be held there in 2016, i.e. the World Youth Day.

Chair: *Tamás Egedy*

Schedule: Tuesday, 1 September, 08:30–10:15

HALF A CENTURY OF URBAN REGENERATION IN LLEIDA RIVERFRONT (SEGRE BASIN, CATALONIA, SPAIN). CHANGES IN LAND USE AND LOCAL PLANNING

Authors: *Albert Santasusagna Riu**, Universitat de Barcelona, Spain; *Joan Tort Donada*, Universitat de Barcelona, Spain

Keywords: Lleida, riverfront, Segre basin, urban planning, urban regeneration

Abstract: The coexistence of city and river is an objective of enduring relevance in our relationship with nature. Since the 1980s, a whole series of plans for the urban regeneration and development of riverfronts have been introduced at the local level throughout Europe. An excellent example of this new integrated policy is provided by the Segre river as it passes through Lleida (Catalonia, Spain), where riverfront regeneration began with the urban development that followed the 1982 flood. Ambitious urban projects were implemented, including river channelling, the designing of a riverside park, the building of the new neighbourhood of Cappedont and the transformation of La Mitjana forest into a new urban park. In this paper, based on a changes on land use study (GIS) and a review of the city's urban planning, we analyse the main urban changes experienced over the last 50 years. We conclude that the urban structure of Lleida has undergone a radical change: in 1956 its riparian vegetation was dominant, followed by agricultural areas and the urban fabric. By 2012, this order had been inverted: today, the urban fabric occupies first place, while green spaces have emerged to occupy second place and the agricultural area has been relegated to third position. Over the last 50 years the city has tried to reclaim and integrate, via a process of urbanization, a major part of the left bank. From the data generated, we are able to analyze the general trends underlying these changes that have pursued a common goal: an improved city-river relationship.

RELOCATION AS A FORM OF RESILIENCE. CASE STUDY ON THE RELOCATION OF A SMALL SETTLEMENT AFTER A LANDSLIDE EVENT IN SOUTHERN ITALY.

Author: *Yuri Perfetti**, Università della Calabria, Italy

Keywords: adaptation, cultural heritage, environmental hazard, geo-hydrological risk, resilience, territorial consciousness, territorial governance, transformation

Abstract: Italy is characterized by evident elements of predisposition to hydrogeological instability that, added to a process of territorialization, sometimes heedless of the hydrogeological balance and the high seismicity of the peninsula, more and more frequently turn into disasters. About a third of the Italian population lives in settlements located in areas exposed to a high hydrogeological and seismic risk.

Risk mitigation actions undertaken in recent decades, vary considerably depending on the exposed value, on the availability of economic resources and on the risk perception by the involved communities. This paper presents the first results of a research aiming to understand the effects produced by the relocation of Cavallerizzo di Cerzeto, a small Calabrian settlement which became unusable due to a landslide, triggered by heavy rainfall.

The decision to rebuild the town elsewhere, in a safer area and not far from the place of origin, was dictated by the awareness that the ongoing climate change and the resulting extreme meteorological events produce an increase of hydrogeological risk, as well as by the need to keep the community close to the landholdings.

The settlement object of study is particularly interesting for two specific features: the involvement of a community belonging to an ethno-linguistic minority (the italo-albanian arbëreschë one), used to pass down its culture almost exclusively orally; its total reconstruction reproducing the original urban structure and the neighborly relations.

LES NOUVELLES FORMES DE LA SOUTENABILITÉ: RÉ-PLANIFIER LE PAYSAGE RURAL AU RISQUE DE DÉSERTIFICATION

Author: *Maria Luisa Ronconi**, Università della Calabria, Italy

Keywords: climate change, drought, environmental hazard, land use, landscape planning, resilience, rural development, soil erosion, sustainability

Abstract: La planification du territoire a la tendance à réduire l'impact environnemental, plutôt que à répondre aux impacts de l'environnement, en négligeant les services écosystémiques de la nature.

L'étude de cas concerne une soutenabilité qui est résilience, appliquée au paysage rural au risque de désertification croisant la technologie du processus avec ce la du produit, sans déconstruire son dessin systématique concernant interactions objet-sujet, matérielles-immatériel et nature-culture.

Un raisonnement géographique analyse les interactions entre les facteurs et dans processus mais aussi entre et dans les domaines de la vulnérabilité et de la soutenabilité. La rencontre des facteurs naturels endémiques et anthropiques globalisé rend impossible une limite entre eux et induit une réflexion à l'échelle de géosystème. Dans un système-monde loin de l'équilibre de la soutenabilité, qui est remis en cause par la nécessité de vivre avec le risque, on ouvre la voie à la résilience, qui explore les techniques pour un monde en équilibre.

Une économie de la connaissance compare le problème local avec le global et il ne pose pas le profit comme condition, mais le produit comme objectif. Elle utilise les ressources humaines et environnementales dans une gouvernance pragmatique et inclusive qui ne dépend pas de la présence/absence des ressources, mais de leur utilisation dans les PED comme dans le PDEM, capable de se déplacer dans les processus, plutôt que l'arrêter.

Organizers: *Zsombor Nemerkenyi, José Jesús Reyes Nunez*

Location: Room H

SLOT1

Chair: *László Zentai* Discussant: *Zsombor Nemerkenyi*

Schedule: Monday, 31 August, 13:00–14:45

MEMORIAL SITES AND RISK GEOETHICAL EDUCATION IN CALABRIA (SOUTHERN ITALY) THROUGH AN OPEN SOURCE GIS PROJECT

Authors: *Francesco De Pascale**, University of Calabria, Department of Languages and Educational Sciences, Italy; *Marcello Bernardo*, Department of Languages and Educational Sciences, University of Calabria, Cosenza, Italy; *Francesco Muto; Alessandro Ruffolo*

Keywords: anthropocene, Calabria, geoethics, GIS, memorial sites

Abstract: About two centuries ago, the Earth entered the Anthropocene, a new geological epoch in which man has a marked impact on climate and the environment. In comparison with slow passing of previous millennia, our species has, in a very short time, radically altered the world's ecosystems. For some years now, interest in Italy has been increasing in Geoethics and ethical, sociological and cultural implications of Earth Sciences. This involves amplifying the prospects and expectations of Geosciences and highlighting the fundamental role of geological and geographical studies in finding solutions to practical problems that man faces which are also compatible with the preservation of nature and the planet. Indeed, man can even be an active participant in natural catastrophes in the sense that he is able to amplify the damage and natural dynamics. A questionnaire was given to students and adults in an area of Calabria which has recently been affected by an on-going seismic sequence. In this way, the knowledge effectively possessed (relating to age, experience and area of origin), and analogous and differing perceptions of earthquakes are highlighted. Furthermore, to effectively evaluate the risk, it is not enough to know the hazard, but we must also carefully assess cultural heritage in the area, which could be affected by natural disasters, and the vulnerability. In this context, a census of memorial sites in Calabria was made. The data collected were used to project and create new Open Source GIS instruments, effective in enhancing cultural tourism of area and risk education.

APPLYING GIS TO CREATE A HALF-CENTURY RURAL DATA PACKAGE: EXPERIENCES FROM KERMANS SHAH PROVINCE, IRAN

Author: *Shahbakhti Rostami**, Payame Noor University, Iran

Abstract: (In)accessibility to rural data is a big challenge for most Iranian managers, decision-makers, planners, and academic circles. There are some large volumes of formal data gathered by government from rural areas during the last 50 years in form of census data; however, a main problem is data sparseness. It seems that creating a rural comprehensive database which comprises all collected data during the last 6 censuses is a remedy for the mentioned problem. In this research we have created a geo-database which contains all spatial, economical and social data of about 3000 villages of Kermanshah province in Iran. About 1146500 items of data are entered into the mentioned rural geo-database. The process was as follows:

- Transferring all census data from hard copies into Microsoft Excel
- Entering geographic coordinates of all villages
- Considering a unique code for each village for join purposes of different tables of each census
- Creating a point file representing all villages in ArcMap
- Preparing the database for future queries.

Findings of the mentioned project show that all planners, decision makers and academic circles in Kermanshah province now have access to a comprehensive database which stores all official and formal data collected during the last 50 years. All these groups now can do any kind of analysis related to different aspects of rural life in Kermanshah. In final report we have presented many interesting results about spatial distributions and relations of many rural features such as rural population, households, literacy and illiteracy, schools, mosques, health centers and other rural services.

Interviews with different users of Rural Kermanshah Database indicates that the project is a successful experience and can be recommended for all other provinces of Iran and perhaps elsewhere.

CROWDSOURCE NOISE MAP FOR HUNGARIAN SMALL TOWNS

Authors: *László Zentai**, Eötvös Loránd University, Department of Cartography and Geoinformatics, Hungary; *Andrea Pödör; András Révész*

Keywords: noise map, smaphone, visualization

Abstract: Noise pollution is one of the main environmental problems in urban areas. According to the Environmental Noise Directive of the European Union 2002/49/EG (END), each agglomeration with a population of more than 250 000 – pursuant to article 7 – should create a noise map. Hungarian small towns lack financial resources to create official noise maps. The concept of using humans as sensor has a growing importance in the European Union. There are several applications which can be capable of doing noise measurements with smartphones. In this study the authors evaluate the usability of noise data measurement capabilities of an average smartphone and make a comparative study on available open source mobile applications potentially suitable for noise mapping. The study confirmed that

the tested mobile applications running on the smartphones are not capable of scientific measurement, although tendencies suggest that calibration may lead to reasonably accurate noise level capture. This method can be involved in testing the effect of the action plans created by the settlements in order to reduce noise pollution and can be used for determining the most polluted areas.

The efficient visualization of the collected data is regularly not available in these smartphone applications, but this can also be an important part of the project in order to support the analyzing and the decision making process.

FOREST HOMOGENEITY ASSESSMENT USING MULTI-DATA SEGMENTATION TECHNIQUES

Authors: *Márton Dedk**, Eötvös Loránd University, Hungary; *Kristóf Kelemen*, Department of Plant Systematics, Ecology and Theoretical Biology, Eötvös Loránd University, Budapest, Hungary; *Tibor Standovár*, Department of Plant Systematics | Ecology and Theoretical Biology, Eötvös Loránd University, Budapest, Hungary

Keywords: ecology, forestry, GIS mapping, remote sensing

Abstract: During the survey of the Hungarian NATURA 2000 protected forests requires a lot of field work. To decide which areas should be surveyed with more sampling points and which need less a homogeneity assessment is needed. For this task segmentation techniques using different data sources are ideal. 1 m/px aerial images with a NIR band and 10 point/m² LiDAR derived products (DSM, DEM and nDSM) were used to find spatial patterns in forest areas regarding closure and canopy spacing. Our sample area is the Hungarian Aggtelek Karst, which is a world heritage site and has characteristic ecological and geomorphological features having both open and closed forest as well deciduous and coniferous trees with different ground vegetation. The results were correlated with field measurements regarding closure and species diversity. We discovered that LiDAR elevation data and aerial photography-derived shadow-light areas alone can both yield fairly accurate results, but the two combined can be a very effective tool for homogeneity assessment.

SLOT2

Chair: *László Zentai* Discussant: *Zsombor Nemerikényi*

Schedule: Monday, 31 August, 15:15–17:00

A GEO-ONTOLOGY FOR DIGITAL HUMANITIES: THE EXPERIENCE OF GEOLAT PROJECT

Authors: *Timothy Tambassi*, Università del Piemonte Orientale, Italy; *Raffaella Afferni**, Disum - Geolat - Università del Piemonte Orientale, Italy; *Maurizio Lana*

Keywords: geography, GIS mapping, literature

Abstract: GEOLAT project can constitute an example of the application of Digital Humanities' methods to the study of Antiquity, making accessible the Latin literature through a query interface of geographic/cartographic type. Its aim is to represent information in four different domains: contemporary and ancient geography, computer science, Latin literature and philosophical ontology. In particular, the information of these domains are collected in a comprehensive and informative geographical ontology, which gives account to the geographic knowledge expressed in the Latin Literature and plays a central role in intelligent spatial search on the web and serves as a shared vocabulary for spatial mark-up of Web sources.

In this paper, we discuss the key-points of GEOLAT project and its own ontology. The first point is the analysis of Latin literature texts, in order to identify the geographical entities typologies and properties. The second is the study of the differences between ancient and contemporary geography, in terms of domains, presuppositions, representations and vagueness. The third is a critical review of the contemporary geo-informatics ontologies. This is important first of all to identify common classes and properties, and then to specify missing classes and properties in order to describe ancient geography. Finally, the fourth point is a reunification of this type of information in a comprehensive and informative geographical ontology for Latin literature. In particular, the conceptualization of GEOLAT ontology has to be accessible and informative both for the scientific community and for non-professional users.

UNDERSTANDING THE URBAN SPACE USAGE OF FIRST-TIME VISITORS, RETURNING TOURISTS AND LOCALS THROUGH GEOTAGGED PHOTOGRAPHY

Authors: *Bálint Kádár**, Budapest University of Technology and Economics, Hungary; *Mátyás Gede*

Keywords: Budapest, flickr, Prague, tourism space, tourist movement, Vienna, visualization

Abstract: In most large cities of tourists' interest visitors and locals mix together in the streets and squares of central areas. Distinguishing tourists from locals is hard in such urban environments, while the motivations of the two groups are quite different, sometimes leading even to conflicts between the two groups. First-time visitors cause most of the problems related to tourism, like congestion, functional over-use and poor economical return (Russo, 2002). Still, few studies delivered evidence on the patterns of space consumption of first-time visitors and other tourists in cities (Kádár & Gede, 2013).

The space usage patterns of first-time visitors, returning tourists and locals were visualized, measured and evaluated through the analysis of geospatial and temporal data retrieved from geotagged photography uploaded to Flickr.com. The maps generated from such crowdsourced database for Budapest, Prague and Vienna show significant differences in the spatial preferences of first-time visitors and all other users of these cities. In deed locals and returning tourists have a shared interest in large parts of the core areas, while first-time visitors move only in a confined part of the centre between the main tourist attractions. The geospatial analysis of geotagged photography retrieved from social media is proven to contribute to the understanding of tourist space usage in cities, delivering some of the missing evidence on theories of the different travel motivations and space consumption of first-time visitors and other returning or longer staying tourists.

TESTING THE USE OF CARTOGRAMS IN HUNGARIAN SCHOOLS

Authors: *José Jesús Reyes Nunez*, Eötvös Loránd University, Hungary; *Barbara Juhász*; *László Zentai**, Eötvös Loránd University, Department of Cartography and Geoinformatics, Hungary

Keywords: cartograms, cartography, geographical education, school cartography

Abstract: The beginning of the use of cartograms can be dated to the second half of the 19th century, but they became more popular in the first half of the 20th century. The first cartograms (or cartogram-like representations) were published in journals or newspapers for the public in general, but also in textbooks and school atlases to be used by teachers and students. Their use in teaching activities and their popularity in general decreased during the second half of the 20th century until the last decade of the past century. Currently can be observed a revival of the cartograms, which are empowered with new graphic solutions created for the geovisualization of data on the Web. An interesting question is if the cartograms can recover or not their place in school cartography. After theoretical research to find an answer to the previous question, a survey was organized on this topic in two secondary schools in Budapest. Geographic and geometric area cartograms were tested with 118 pupils. The obtained results are presented on this poster, reflecting a duality in the reading and understanding of cartograms, constituting a starting point for more future empirical research on this theme.

ONLINE SOCIAL NETWORKS AS DATA SOURCES FOR GEOSPATIAL ANALYSIS

Author: *Akos Jakobi**, Eötvös Loránd University, Hungary

Keywords: big data, Hungary, network geography, online social networks, virtual space

Abstract: The nowadays very popular online social networks (OSN) are basically virtual creations, which stand for expressing real life friendships in forms of virtual space acquaintance. They serve also as major platforms of ICT-enabled communication, supporting place-independent social life, however, recent findings suggest that geographical location of users strongly affect network topology. As a matter of fact OSNs may be related to locations, since the users themselves could be at large geographically located as well. By retrieving geolocated data from the network-database of an OSN it becomes possible both to visualise and to analyse geographical relations of users.

This study attempts to highlight the usefulness of OSN data in geospatial analysis of the 21st century society. It also aims to introduce how online social network connections are following geographical rules by the assistance of geovisualisation and analytical techniques.

Examples of iWiW, for many years the largest Hungarian online social network, are applied to show spatial distribution of city to city connections. Different maps of network topology lead us to a conclusion that many new aspects of the geography of the information society are possible to be analysed with this methodology. Maps of settlement level aggregated data reflect user rates, connectivity and space-time diffusion patterns of the once leading Hungarian OSN to understand how network space relations are attached to geographical conventions.

P56 UNEVEN GEOGRAPHIES OF EDUCATION AND LEARNING IN A CHANGING EUROPE

Organizers: *Ferenc Gyuris*, *Holger Jahnke*

Location: Room H

SLOT1

Chair: *Ferenc Gyuris*

Schedule: Wednesday, 2 September, 15:00–16:45

UNEVEN GEOGRAPHIES OF EDUCATION: OPPORTUNITIES FOR A COMPREHENSIVE RESEARCH DESIGN

Authors: *Holger Jahnke*, Europa-University Flensburg, Germany; *Ferenc Gyuris**, Eötvös Loránd University, Hungary

Keywords: comparative methodologies, geographies of education, policy mobilities in education, scale and education, spatial inequality

Abstract: Austerity measures following the global financial crisis as well as the multifaceted social tensions emerging around them have resulted in increased attention to and intensifying debates around education. The issue is strongly geographical in nature, not only since schools as the sites of formal education and learning are fixed in geographical space, but also because new forms of educational governance develop, leading to uneven development of educational infrastructures. Contemporary changes in the landscape of education bring forth an increasing need for a comprehensive research design enabling tackling with upcoming questions in an integrated manner and in a comparative geographical approach. In our paper we aim at identifying and, through examples from our so-far research results, presenting some conceptual and methodological opportunities for such a research design, with special emphasis on the following issues: 1. Education is understood as a complex phenomenon in different material (buildings, equipment etc.) and non-material arrangements (e.g. national or regional legal frameworks) with different spatialities and nested at different scales. 2. Education is not just a service, but a prominent actor of local networks, societies and economies, with wide-ranging impacts on seemingly distant spheres of social life. 3. The notion and purpose of education are not universal but always embedded in specific geographical settings. Hence, the spatial mobilisation of academic and policy concepts as if they were of universal validity should be critically reinvestigated.

GEOGRAPHY OF SCHOOL CLOSURES IN POLAND

Author: *Artur Bajerski**, Adam Mickiewicz University in Poznań, Poland

Keywords: educational policy, Poland, school closures

Abstract: In the recent years there has been a growing interest in Poland in the operation of primary schools in space. This is connected with growing problems involved in the organisation and maintenance of the school network, which is the responsibility of communes. Owing to a combined impact of a variety of factors, mostly demographic and economic, in the years 1990-2012 the number of primary schools in Poland dropped from 19.4 to 12.8 thous., i.e. by 6.6 thous., of which as many as 5.5 thous. disappeared in the years 1999-2012. Despite the great dynamics of change in the school network, only rarely has a research been conducted on its spatial differences and factors influencing school closures in macro-scale. The aim of the paper is to present “geography” of school closures in Poland and to try to explain, by the use of quantitative methods, what are the factors influencing it.

REPRODUCTION OF SOCIAL INEQUALITY IN LANDSCAPES OF EDUCATION

Author: *Anika Duveneck**, FU Berlin, Germany

Keywords: educational policy, urban entrepreneurialism

Abstract: The paper deals with forms of uneven development caused by new educational concepts which ironically aim at confronting social inequality. It presents the educational landscape “Campus Rütli”. The project has been initiated by district Berlin-Neukölln in reaction to the incapacity of its school to deal with massive social problems. The analytical focus lies on the broad educational approach to compensate children’s disadvantages by the inclusion of non-formal education such as youth work which allows making systematically use of its social potentials. An empirical study of the project reveals that under conditions of interurban competition, the potentials become instrumentalized for a one-sided support of the school and finally lead to another dimension of discrimination in at least two dimensions: On the one hand, the orientation towards school becomes identified as means to attract alternative middle-class families. As they are interested in schools with a social profile but do not use the youth club, arising problems for youth work caused by the instrumental approach are neglectable for the district. For children and youth which become structurally discriminated by the selective school system, the fact that youth work loses its professional autonomy from school means that they lose an alternative access to education independent from school and professionals which can act as partners against school if necessary. Further, if the Project successfully rises the district’s attractiveness for the target group, it induces a process of social upgrading which finally leads to the replacement of socially disadvantaged families to even poorer districts.

THE NEOLIBERAL AMERICAN CITY AND ITS SCHOOL MARKET

Author: *Nora Nafaa**, ENS de Lyon, France

Keywords: neoliberal capitalism, school cartography, school closures, urban changes

Abstract: Since the No Child Left Behind Act took effect in the United States of America, the struggle of the public school system has been shown as dealing with intense reforms. For even twenty years, the various changes symbolize the transition from a moderate state control to its withdrawal in different competences. Neoliberalism can be used to describe this mutation. In the most overdrawn spaces, such as industrial cities undergoing crisis, triggers a deregulation and brings about conflicting situations, which reveal deeper urban transformations.

The spatial effects of new market mechanisms within public school system can be seen through the case study of the Philadelphia school district in Pennsylvania. The study has been led in West Philadelphia, a neighborhood that used to be a low-income and mainly African-American neighborhood that entered a strong phase of gentrification since the University of Pennsylvania, known as Upenn, decided to extend the campus.

The geography of education shows that the strategies of the various actors tend to enhance the new metropolitan order of the American cities. Parents have school strategies whereas the school district authority goes for school closures and the university for partnerships with the public schools making them selective. The data used were collected through interview and surveys and are supported by a mapping of the school district.

The major trends in the new school markets and their spatial effects show that comparisons can be drawn overseas. This study would be relevant to think and discuss about the European cases.

URBAN POLITICAL ECONOMIES OF EASTERN EUROPE FROM A GLOBAL PERSPECTIVE

Organizers: *Marton Czirfusz, Zoltán Ginelli (Gyimesi), Zsuzsanna Pósfai*

Location: Room L

SLOT1

Chairs: *Marton Czirfusz, Zoltán Ginelli (Gyimesi), Zsuzsanna Pósfai*

Schedule: Monday, 31 August, 13:00–14:45

URBAN ENTREPRENEURIALISM OF BUDAPEST DISTRICT 8 FROM A GLOBAL PERSPECTIVE

Authors: *Marton Czirfusz**, HAS Centre for Economic and Regional Studies, Hungary; *Csaba Jelinek*

Keywords: Budapest, critical theory, semi-periphery, urban entrepreneurialism

Abstract: District 8 of Budapest is an inner-city neighbourhood, historically a stigmatised area with high prevalence of urban poverty and bad housing conditions. In the past few years the district has taken an active role in its gentrification under urban neoliberalism: urban renewal efforts include the eviction of underprivileged families and attracting capital for building new homes for students and the (upper) middle class.

We argue in our paper that this urban change is embedded in global political economies. Disinvestment under Socialism might be explained by looking at waves of global capitalist development and Hungary's semi-peripheral role in the global world order. Urban renewal of the neighbourhood after 1990 is structurally determined by global expansion of financialisation (boom of the mortgage market) and multi-scalar economic flows (such as EU transfers). However, we also argue that these structural dependencies are in a dialectic relationship with local agency (i.e. the mayor's role in fuelling urban social change). What follows from this perspective is that theory-building of urban entrepreneurialism must be able to accommodate these place-specific interplay of social change.

NEW PATHS AND GEOGRAPHIES OF PUBLIC HOUSING IN CZECHIA: IN SEARCH OF EXPLANATIONS

Author: *Roman Matousek**, Charles University in Prague, Czech Republic

Keywords: Czech cities, housing, transformation

Abstract: General narrative on the changing role of public housing in Czechia during post-communist transformations stresses extensive privatization of housing and a creation of a „homeowners society“. Housing owned by the state or municipalities gradually became a marginal part of housing markets. While generally accurate, this narrative overlooks uneven geographies of transformation processes. Neoliberal nature of transformation processes minimized the role of the state and supported local initiative on municipal level with diversity of housing policies and practices. The paper first explores diversities in housing transformation between different municipalities, focusing on both the quantity of municipal housing stock and on the goals of its management. Privatization and marginalization of public housing in majority of places was combined with its expansion in other. In the second part, the paper uses critical spatial perspective and political economy discuss some possible explanation of this diversity.

TOWARDS POSTPOLITICAL WATERFRONTS IN POSTSOCIALIST CENTRAL AND EASTERN EUROPE (?): A CRITICAL PERSPECTIVE ON INTERPLAY BETWEEN CAPITAL, INSTITUTIONS AND POLITICS IN POSTSOCIALIST BRATISLAVA

Author: *Branislav Machala**, Czech Republic

Keywords: Bratislava, political economy, postpolitics, post-socialist city, waterfront transformation

Abstract: Transition of postsocialist cities in Central and Eastern Europe is, even 25 years since the end of communism, still apparent in their dynamic adaptation to capitalist conditions. Their rapid systemic reconfiguration accompanied by delayed industrial decentralization, economic integration into global economy and increasing interurban competition among cities for scarce resources, is especially visible on waterfronts. Debate on theoretical framing of waterfront transformation has been evolving among urban geographers for more than half a century. However, the nature of waterfront transformation in the postsocialist context is still unexplored and only a limited number of studies have paid close attention to this significant inner city transformation. This presentation critically evaluates the interplay of key driving forces like capital, institutions and politics, which transform waterfront ecology in postsocialist Bratislava. The missing division along political ideologies and the shift towards technocratic management and policing of the waterfront transformation, I relate to the recent debate on postpolitics. Such framework shifts the focus towards missing agonistic political debate on future of postsocialist urban waterfronts. The presentation looks closer to influence of scales and networks of actors on decision making processes related to waterfront transformation by using political economy approach. I elaborate on how actors and their interests transform waterfronts and what constitute political decision making in underfunded and continuously adapting postsocialist institutions. Therefore, the foci of this presentation are relations between uneven spatial concentration of capital and nature of decision making process of postsocialist public institutions in multi-scalar institutional spaces.

EUROPEANIZATION AS URBAN ENTREPRENEURIALISM: SOUTH MORAVIAN REGION AND THE POLITICAL ECONOMY OF EUROPEAN STRUCTURAL FUNDS

Author: *Daniel Šitera**, Graduate School of Global and Area Studies, Leipzig University, Germany

Keywords: critical political economy, knowledge-based economy, urban entrepreneurialism

Abstract: This contribution uncovers the crucial role of the EU Cohesion Policy and its Structural Funds (ESF) in the promotion of urban entrepreneurialism in the Central and East European core city-regions. Grounded in a theoretical intersection between the critical political economy of European integration and critical urban studies, it proposes three main assumptions. First, as state-rescaling engines in EU's peripheries, the ESF promote the consolidation of urban growth coalitions on the subnational scales of governance in Central and Eastern Europe. Second, this involves a restructuring process which encourages the growth coalitions to articulate economic imaginaries (B. Jessop and N.-L. Sum) of regional competitiveness, knowledge-based innovativeness, and socio-spatial distinctiveness which would comply with the neoliberal content of transnational capitalist regulation promoted by the European Commission. Third, these imaginaries are then socially regularized through the ESF-financed flagship projects: investment in human and physical capital such as the production of knowledge workers and the establishment of research centers that facilitate university-business cooperation in order to stimulate research and development in various branches of bio- and information-technologies. This contribution tests such theoretical assumptions on the empirical terrain of Brno, South Moravian Region. It analyzes the social basis of Brno's growth coalition (e.g. Regional Development Agency South Moravia) and the semantic content of regional development strategies (Regional Operational Programme, Regional Innovation Strategies) that is connected to the EU's grand strategies such as Lisbon Agenda/Horizon 2020 and being materialized through the ESF-financed flagship projects (e.g. Central European Institute of Technology).

SLOT2

Chairs: *Marton Czirfusz, Zoltán Ginelli (Gyimesi), Zsuzsanna Pósfai*

Schedule: Monday, 31 August, 15:15–17:00

PERSONAL DEVELOPMENT AND THE FLEXIBLE CONTRACTS: DEPOLITICIZED CLASS STRUGGLES BETWEEN HIGHLY SKILLED WORKERS AND MANUAL WORKERS IN CLUJ

Author: *Norbert Petrovici**, Babes-Bolyai University, Romania

Keywords: employability, self-development, class struggles, Eastern Europe

Abstract: Despite diminishing levels of European aggregate demand for jobs and “transitional unemployment”, many East European cities were able to negotiate a new position of command and control in the global urban hierarchy. The last two decades, for the major cities, meant major transformation in terms of connectivity to the global flows of capital. Job creation was predicated in these cities on service offshoring, consultancies and managing the sale of state assets and the creation of new economic institutions, local business-to-business chain making, and command and control function for the new production facilities set up in the region. A new wave of optimism came with the narrative of “portfolio worker” as the social structure of the city accommodates an expansion of the professional positions at the expense of the blue collars relocated in the suburbs and surrounding towns. However, the firm becomes increasingly unreliable in providing a stable position or even the prospects of advancement, but may offer the necessary support to enhance one's employability. Employability promises the freedom to choose between successive positions and transform them in learning experiences within a career field. In this paper I aim to better understand the relation between the employee and the firm by putting in doubt the classless imaginary of the employability discourse. Focusing on the employability narrative among highly skilled, skilled and unskilled workers in a middle scale city in Romania, Cluj, a second tier city in the urban hierarchy of Central Europe, I will question the very assumption that the whole issue of the employee-employer relation is a one-to-one relation between a person and the firm, without political consequences for the other employees. In this paper I explore the way employability works in producing new class tensions between the various fractions of the workers, following the classification effects of the self-development, self-bettering and self-education narratives.

DUALITY OF RESIDENTIAL DECONCENTRATION AND JOB CENTRALIZATION IN POSTSOCIALIST URBAN REGIONS: NEOLIBERAL CAPITALISM AND SUSTAINABLE DEVELOPMENT

Authors: *Ludek Sykora**, Charles University in Prague, Czech Republic; *Ondrej Mulicek*

Keywords: centralization, deconcentration, fragmented government, neoliberal capitalism, post-socialist city, urban region

Abstract: With the transformation towards neoliberal capitalism, post-socialist city regions have been reshaped by new spatial economies. Using data on population, jobs and commuting, we document the processes of (de)concentration and (de)centralization of residences and jobs in functional urban regions of Prague and Brno between 1991, 2001 and 2011. First of all, massive residential suburbanization has driven rapid deconcentration of housing and population through spatial dispersal and fragmentation in expanding urban regions of major cities. Secondly, and more surprisingly, despite the emergence of new suburban growth job places, the location of jobs and commuting to work has been primarily driven by the increasing economic dominance of core cities leading to increasing centralization and concentration of jobs in metropolitan cores. Post-socialist metropolitan areas are being reshaped by the duality of symbiotic trends of deconcentration of residences and centralization of jobs. The reality of economic

drivers of capitalist spatial economy that favors centralization of jobs and decentralization of residences, thus leading to ever increasing commuting, is undermining the options for more sustainable urban development, which can hardly be achieved in the context of policies favouring global circulation of investments in free market conditions coupled with locally embedded and spatially fragmented land use planning and decision-making practices on real estate development.

THE ROLE OF GROWTH COALITIONS AND ACTOR-NETWORKS IN THE FUNCTIONAL TRANSFORMATION OF FORMER INDUSTRIAL AREAS: A COMPARATIVE ANALYSIS FROM POST-SOCIALIST BUDAPEST

Author: *Márton Berki**, Eötvös Loránd University, Budapest, Hungary

Keywords: actor-network theory, brownfields, functional transformation, growth coalitions

Abstract: Based on two empirical studies, this paper focuses on the role of growth coalitions and actor-networks in the functional transformation of former industrial areas in post-socialist Budapest. Both sites, Millennium City Centre in District IX and Millenáris in District II represent important growth axes of the capital city's rapidly expanding CBD-functions. Using the approach of actor-network theory (ANT), the comparison of these two areas allows us to identify the agency and interactions of key actors shaping the functional transformation of former brownfield sites.

When comparing the two areas' transformation processes, it can be argued that the principal aim of the growth coalition was to attain as large profit as possible in the case of Millennium City Centre (a valuable Danube waterfront area), whereas the main goal of the network established around the similarly well-located Millenáris venue was exactly the opposite. Here, although in a highly politicised way, the actor-network primarily evolved around the creation of an urban green space and the protection of industrial heritage; as a result of their lobbying activity, there was less space left for neoliberal urban development determining the transformation of Millennium City Centre.

Nevertheless, in contrast to this fundamental difference, the common features of the transformation of the two areas include their extraordinarily heterogeneous actor-networks (consisting of actors with conflicting interests) and their less transparent functional change: both investments were realised in an "immature" legal and regulatory period, as well as in the relatively same kind of uncoordinated and ethically contested way.

P59

WHERE PEOPLE SHOP: DYNAMICS IN METROPOLITAN RETAIL LANDSCAPES IN EUROPE

Organizer: *Herman Kok*

Location: Room H

SLOT1

Chair: *Herman Kok* Discussant: *Eduard Francois Nozeman*

Schedule: Wednesday, 2 September, 10:45–12:30

EUROPE, A SINGLE MARKET FOR INTERNATIONAL READY TO WEAR RETAILERS. REALLY?

Authors: *Benjamin Wayens**, *Adeline De Vleeschauwer*

Keywords: consumption, regional markets, retail, urban landscape

Abstract: The article examines the geography of the international presence of ready to wear retailers within a set of 29 European countries. The empirical analysis of the settlements of stores operated by major groups (identified by the Amadeus database and retailers websites) shows that the European area is segmented into nine cultural markets sharing a set of retailers: France, English speaking countries, the Nordic countries, Germany and Austria, major Mediterranean markets, the Mediterranean periphery, the islands, central Europe and Eastern Europe. Retailers operating on the European market can be classified into 8 categories: ubiquitous retailers at European level, international retailers, retailers not in the English market, retailers not in the French market, retailers not in the French and English markets, the predominantly French brands, predominantly English speaking retailers and purely local players. Luxury brands have more international strategies than mass retailers. In networks, the country of origin of retailers generally occupies a prominent place, even if the brands belonging to the same parent company may have different implementation strategies. This empirical approach based on the analysis of a large database sheds therefore dominant discourses announcing a standardization of commercial landscapes in Europe.

ANTWERP: A POCKET-SIZED METROPOLIS WHERE THE SPACES OF THE DIAMOND'S AND FASHION GOOD'S TRADES STIMULATED THE RISING OF NEW LANDSCAPES OF URBAN'S CONSUMPTION

Authors: *Jeferson Hugo Pacheco de Rezende**, University of São Paulo - USP, Brazil; *Heloísa Gomes*

Keywords: consumption, fashion, luxury, retail, trade, urban geography, urban regeneration

Abstract: From the Americas to Europe, one can find many examples of cities that have developed in such way they behave like a pocket-sized metropolis. In contemporary times, these cities draw attention and awaken interest in their socio-spatial dynamics and its new territorial realities.

Different processes ranging from globalization to the search for better living conditions and new lifestyles, encouraged a worldwide physical and economic growth of medium-sized cities, specifically after the 90's.

The secular multicultural city of Antwerp, is one of the bulwarks of arts, fashion and western culture. Its origin however, is closely linked to trade history: from its important role that it already possessed in the Middle Ages up to the nowadays central role in diamond trade and sea port operations, this Belgian city can teach us lessons on how trade is a stimulus for development.

As can be observed in other cities, the decline of the medieval historic center of the city became problematic in Antwerp in the past. However, through public policies of stimulating trade and services in these areas, the government managed to revitalized this area transforming it into a place of safe and pleasant shopping for its citizens and visitors.

In order to map and analyze the urban processes and interventions that reshaped the medieval center into what it is now - a trendy place of reference in fashion and design and the main center of Flanders shopping – this research is based on studies and theories related to the geography of trade and consumption.

OCCUPANCY COSTS IN RETAILING; AN INTERNATIONAL COMPARISON

Author: *Eduard Francois Nozeman**, Faculty of Spatial Sciences, Department of Economic Geography, The Netherlands

Abstract: Various structural developments on the demand and supply side are deeply affecting physical retailing both in mature and developing markets. Changing demography, urbanization and diverging consumer preferences are the most important ones on the demand side. Online retailing, scaling up of formats and deconcentration are strong factors on the supply side.

Consumer spending on durables is slowing down on national level while services and non durables have been less impacted since the latest financial crisis. Retailers are looking for costsaving strategies, but data show that occupancy costs compared to turnover (OCR) have increased much stronger over the last decade. This tendency is relevant not only for the retailers themselves but also for investors and financiers.

Until now, academics have shown limited attention to this phenomenon. With increasing vacancy endangering facilities especially in midsized and smaller cities, the more in stagnant and slow growth regions solid knowledge is required. What factors do influence the occupancy cost ratio within retailing? Are there differences between types of shopping areas, between lines of industry, between countries and if so which factors are responsible for those differences? Is it useful to look for benchmarking of ratios?

Based on extensive desk research of international literature and statistical analysis of data from the Netherlands relevant factors influencing the OCR will be presented.

EFFECTS OF SUNDAY CLOSURE ON HUNGARIAN SHOPPING BEHAVIOR

Authors: *András Kovács**, Edutus College, Hungary; *Tamás T. Sikos*

Keywords: retail competitiveness, shopping behavior, shopping centre, Sunday shopping

Abstract: Hungarian retail trade sector has been under a constant transformation since the change of regime. This process involves quantitative growth in the number of retail units, and qualitative development in retail services (appearance of shopping centers, hypermarkets, outlet centers, and e-commerce).

After the financial and economic crisis diminishing demand and intense competition have resulted in unfavorable conditions for the majority of marketers. Under these circumstances the Hungarian central government introduced measures to support the market success of domestic owned retail chains: nationalized tobacco distribution, austerity measures were introduced in the wholesale trade of alcoholic drinks, abolished the former system of food and non-food vouchers and introduced a new, controlled voucher system.

As the last and most important means, the Hungarian government decided to restrict retailers' opening hours from 15th of March 2015. Only family owned small shops are exceptions and those that are operating near world heritage sites.

Our research aims to prove that shopping habits will change under the new market rules. We want to describe how costumers shopping activities change in time and space because of the new rules. In our research we surveyed 200 shoppers (with standard questionnaires) about their shopping habits (time, shop preference in case of FMCG-goods and non-perishable goods). In order to describe the altering relations we asked the same group before and after the introduction of the new rule.

CHANGING RETAIL LANDSCAPES IN THE CONTEXT OF LIBERALIZATION AND GLOBALIZATION: THE CASE OF WARSAW AND ANKARA

Author: *Herman Kok**, Multi, The Netherlands

Keywords: consumption, transformation, urban geography, urban planning

Abstract: In many cases, an economic transformation combined with a process of internationalization resulted in major changes in the retail landscapes of cities and towns. Ownership patterns of retailers changed, new formats appeared, international retailers entered the market, and allocation of market shares over the different types of retailers changed. for a variety of reasons, location and real estate requirements of retailers changed. Developers, investors, and also retailers themselves, reacted by building new shopping places, often on locations which were not retail locations before. This often facilitated by an urban planning system which was not well equipped to handle such a new wave of development. And the market context is often one of relatively robust economic growth in combination with an emerging middle class. This paper discusses the case of Ankara and Warsaw. Poland and Turkey went through a process of economic transformation and internationalization in a different way. Warsaw and Ankara are both capital cities, though Ankara is not the prime city. And both cities do for different reasons have a relatively young urban structure in which new development could take place relatively easily. This papers elaborates on how the retail landscapes in both cities changed in the context of the economic transformation, which actors were involved, and how the planning system could respond. Comparing Warsaw and Ankara, this paper focuses on similarities and differences between these two cases.

SPATIAL STRUCTURE AND DISTRIBUTION DETERMINANTS OF WARSAW SHOPPING CENTRES

Author: *Dorota Celinska-Janowicz**, University of Warsaw, EUROREG, Poland

Keywords: location, shopping centre, Warsaw

Abstract: Shopping, and consumption in general, has become significant part of life of modern society. In spatial dimension this phenomena is expressed by proliferation of shopping centres: modern retail spaces, dedicated and designed only for one purpose – consumption. The aim of the paper is to identify spatial structure and distribution determinants of Warsaw shopping centres in 2011. The main area of the analysis were relations between shopping centres characteristics (size, tenant mix, age, parking) and their location parameters (accessibility, market area, distance to the city centre). Statistical analysis revealed only a few and rather weak correlations between centres' characteristics and their location parameters. Quantitatively advanced classification, based on large number of indicators (describing both the centres and their location), enabled to identify some regularities in distribution of specific types of centres. Although the classification has emerged from the exploratory and inductive analysis, based only on statistical methods, distinguished classes refer to some extent to the classical hierarchical model of urban commercial centers. Three groups of shopping centres have emerged from the analysis: (1) a group of large, regional centres located closer to the city centre, that can be considered as the higher level of the hierarchy, (2) a group of smaller local centres, located within residential areas, (3) centres that did not fit into this hierarchy, mainly due to its peripheral location. Thus, in the spatial structure of Warsaw shopping centres features of both - classical hierarchical urban retailing structure and American model of suburban shopping centers – were visible.

P60 WHOSE RIGHT TO THE CITY?

Organizers: *Lucas De Melo Melgaço, Antonin Margier*

Location: Room F

SLOT1 WHOSE RIGHT TO THE CITY? (1)

Chair: *Antonin Margier*

Schedule: Monday, 31 August, 13:00–14:45

LOST IN SPACE: YOUNG PEOPLE, BUS NETWORKS AND RIGHTS TO THE CITY

Authors: *Robyn Adele Lincoln**, Bond University, Australia; *Adrienne Gregory*

Keywords: public space, urban bus networks, young people

Abstract: The many discourses on the use of public space by youth (eg cultural or justice studies) are underpinned by a range of theoretical approaches (Lefebvre's "right to the city", Habermas on the "public sphere", Foucauldian notions of "resistance" or a Durkheimian perspective on "anomie"). Given social and technological change this paper explores the complexities and transformations of urban youth rights in the 21st century. One of its contributions is to demonstrate how the transport environment reflects a different kind of "public space" (mobile, closed, ungoverned, utilitarian, privatised) that has rarely received scholarly attention, unlike the shopping mall, the square or the street. Its second contribution is to critique the body of literature on the "geographies of hanging out". While not eschewing that there remains a punitive law-and-order approach, much of the literature adopts a "problematized" frame and fails to address the agency that young people can muster to create new spaces and engage in meaning-making; or that the streets are sites of empowerment or celebration of diversity such as the Sydney Mardi Gras or the Occupy Movements; or how the web creates new forms of public space for youth with fast communication and democratising features that permit engagement with the public domain. A final thread is the contestation within public transport space from the myriad of other "excluded" user-groups whose experience of the "right to the city" is as conflicted as that of young people (e.g. homeless, elderly, mentally ill).

THE "RIGHT TO MEMORY" IN THE CITY

Author: *Grégory Busquet**, Université Paris Ouest Nanterre-La Défense, France

Keywords: collective memory, right to the city, urban heritage claims, urban sociology, urban space

Abstract: We consider the « right to the city » as a right to renewed urban centrality, to a liberated everyday life, to a "re-appropriation" by citizens of their space and own life, and as a right to participation to decision-making. Radical economic, political and cultural change, based on generalized auto-gestion is a prerequisite for this right. We question therefore, as mentioned in the call for papers, what social movement and which stakeholders can claim this right nowadays. Considering urban space, on the one hand, as the support and object of different political strategies, and on the other hand as a political product, we argue that both dominating and dominated social groups participate, through their conflicts, to the production of space.

By focusing on urban cultural heritage-making, this paper aims to explore how groups engage in conflicts based on their different representations and memories and thus contribute to the production of contemporary urban territories. Considering collective memories of groups (Halbwachs, 1925; Bastide, 1970) in relation to the right to the city (Lefebvre, 1968), through the example of urban heritage claims in Europe, I will discuss the possibility of a "right to memory" in urban space. This right does not sum up the "right to the city" but contributes to it, in the sense of a "re-appropriation" by social groups of their spaces, identities and aspirations. I will also discuss memory claims that dominated classes formulate in public space as a means for achieving the right to the city and social transformation.

TOWARDS A GENUINELY CRITICAL URBAN TRANSPORT THEORY, POLICY AND PRACTICE: MOBILISING HENRI LEFEBVRE'S RIGHT TO THE CITY

Author: *Wojciech Kęblowski**, Université libre de Bruxelles, Vrije Universiteit Brussel, Belgium

Keywords: mobility, right to the city, urban geography

Abstract: Urban transport increasingly functions not just as a framework for moving people and goods, but also as a key component of urban entrepreneurial portfolios and public-private land rent valorisation strategies. As mainstream urban transport policy tends to focus on stimulating urban competitiveness, and hence on connecting selected territories and social groups, some existing transport practices — e.g. congestion charging, zero-fare public transport — claim to offer a more progressive, inclusive and just approach to the way transport infrastructure takes shape. However, there is no comprehensive theory allowing to critically and systematically analyse their allegedly alternative character to the urban entrepreneurial mainstream.

This paper hopes to contribute to the development of such a critical perspective on transport policies and practices by turning to Henri Lefebvre's ([1968] 1996) conceptualisation of "the right to the city." However, rather than dilute its transformative ambition by dividing it into separable liberal-democratic "rights" (e.g. to mobility or transport), Lefebvre's call is approached as a fundamental intellectual antidote to the entrepreneurial condition. This guides a working typology of three main approaches to urban transport — (i) "mainstream"/a-political; (ii) "sustainable"/post-political and (iii) alternative/critical — and consequently helps identify several key aspects that an urban transport policy or practice should incorporate to genuinely enable citizens to appropriate and produce urban space, to challenge existing configurations of power, to become concerned with the total sum of aspects regarding the urban environment, and to acquire a utopian character.

This typology is then applied to empirically examine the power relations behind the production of transport policy in Brussels.

THE CONCEPTUALIZATION OF JUSTICE IN URBAN SPACE: THE CASE OF PUBLIC TRANSPORT IN BRNO

Author: *Gaby Khazalová**, Masaryk University, Czech Republic

Keywords: The Czech Republic, neoliberal capitalism, right to the city, security, spatial justice, transport

Abstract: The paper seeks to contribute to the discussion of urban process under capitalism, revealing the importance of conceptualization of space as an integral part of any proposal for the remedy of not only spatial, but also social injustice. It deals with theoretical conceptualization of spatial justice primarily based on contemporary reinterpretation of Henri Lefebvre's writings. It explores the dispute over relationship between the production of social and spatial injustice in the city presented among others by E. Soja and P. Marcuse. The reason why this relationship should be conceived dialectically — based on the analysis of socio-spatial dialectics — is being argued. The process of producing injustice is being exposed using the specific example of transformation of space: implementation of the so-called „prevention officers" in public transport in the city of Brno, Czech Republic. This example is considered as urban injustice drawn from the normative concepts of right to the city and right to difference. The case study reveals the modes of justification used by the public transport company such as profit increase or security and comfort, claiming to solve the problems with homeless people. Analyzing the way various actors perceive and appropriate transformed space enables to conclude that space is not only produced by social processes, but in turn, reflecting, reproducing or transforming them. In conclusion, the paper raises questions about the potential remedy of injustice by transforming not only social processes (e. g. capitalism), but also spatial relations.

INTERROGATING THE "RIGHT TO THE (ELECTRIC) CITY" IN RIO DE JANEIRO FAVELAS THROUGH SOCIO-TECHNICAL SYSTEMS

Author: *Francesca Pilo**, CESSMA (Paris VII), France

Keywords: right to the city, Rio de Janeiro

Abstract: Universal access to urban services is recognized as a fundamental dimension of the implementation of the "right to the city", and most importantly as the right to live in the city in dignified conditions. This question is particularly relevant in the cities of the South, where the inequalities in access to urban services, in both quantitative and qualitative terms, are part of a larger process of urban fragmentation. Based on a study of electricity regularization projects in Rio de Janeiro's favelas, this paper approaches the "right to the city" as a concept which allows us to reflect on the "co-production of spatialized and territorialized norms of the just and unjust between public authorities and citizens" (Morange et Spire 2014, p. 4). Through an empirical analysis of the socio-technical tools (Akrich 1987), particularly the electricity meters, we will show two things: On one hand, we show how the regularization of electricity service is a process which aims to "normalize" (Foucault 1975) the behavior of these citizens as customer of a commercialized public service. On the other hand, we will explore the nature of the identified conflicts between the favelas' inhabitants and the electricity distribution company.

This analysis is based on fieldwork conducted in Rio de Janeiro in 2010-2011, consisting of semi-structured interviews with 25 households in Santa Marta favela and with staff of the electricity distribution company. It is part of the author's PhD thesis in Urban Planning defended in February 2015 at the Université Paris-Est.

Bibliography: Akrich, M. 1987. « Comment décrire les objets techniques? », *Techniques & Culture*, no 9: 49–64. Foucault, M. 1975. *Surveiller et punir: naissance de la prison*. Paris: Gallimard. Morange, M., et A. Spire. 2014. « Le droit à la ville est-il soluble au Sud ? », *Métropolitiques*, 5. Pilo, F., 2015. *La régularisation des favelas par l'électricité. Un service entre Etat, marché et citoyenneté*, Université Paris-Est, 505

SLOT2 WHOSE RIGHT TO THE CITY? (2)

Chair: *Lucas De Melo Melgaço*

Schedule: Monday, 31 August, 15:15–17:00

BEGGARS IN GENEVA: NO RIGHT TO THE CITY?

Authors: *Annamaria Colombo**, School of Social Work Fribourg - University of Applied Sciences and Arts of Western Switzerland (HES-SO), Switzerland; *Giada De Coulon*; *Caroline Reynaud*

Keywords: homelessness, local governance, poverty, public space, right to the city, Roma issues, urban space

Abstract: In 2008 was implemented in Geneva (Switzerland) a law, which restores the prohibition of begging and gives right to police agents to immediately seize its profits. The political rhetoric used to promote this new law alluded to the large presence of beggars, especially Roma from Romania, in the streets of Geneva as a source of insecurity: passers-by were subject to constant harassment and public space was being deteriorated. Indeed, the visible presence of Roma from Romania begging on their knees, prostrated and sleeping under bridges (especially since 2006, when new agreements concerning freedom of movement were concluded between Switzerland and Romania and Bulgaria) generated an intense debate in the public space.

But who really are the beggars in Geneva? Do they all develop the same strategies and practices in the public space? What are the senses of begging for them? What are their representations of the anti-begging law and its effects on their practices? This presentation is based on a one-year intensive fieldwork in Geneva (2013-2014) which triangulated qualitative interviews with beggars and parliamentary debates analysis. The rich constituted database was interpreted with an analysis grid constituted of elements of the sociology of representations and Karsz's transdisciplinary approach of practices analysis. It reveals a tension between a diversity of representations that can be considered as concerned actors' answers to the question "Whose right to the city?". The presentation will especially focus on beggars representations on begging and cohabitation in public space.

FROM THE URBAN CONFLICT TO THE DENIAL OF THE RIGHT TO THE CITY

Author: *Antonin Margier**, University of Lille 1, France

Keywords: conflicts, homelessness, public space

Abstract: Geography has shown that urban spaces, and especially public spaces, are contested. Hence, conflicts "can provide clues about power relations" (Sibley, 1995: xiii), such as in La Goutte d'Or. In this neighborhood in the north of Paris, the contested occupancy of public spaces makes tensions appear between residents and homeless. Through this case, this paper aims to reveal the combination of physical, symbolic and political dynamics in the denial of the legitimacy of homeless to dwell in the neighborhood. By the creation of an association, a part of the residents manages to monopolize the public sphere, especially through the conquest of the neighborhood council. From this position, they are able to use discourses (Foucault, 1975; Bourdieu, 1982) in order to disqualify symbolically the presence of homeless in public spaces and to impose their own conception of the legitimate practices. Consequently, even if several homeless estimate that they have something to say, they face many resistances to access to the public speech and to get a political representation. Finally, all these discourses tend to be articulated to public policies, through which a "residential" representation of public space is imposed in urban planning and social policies. Then, the resolution of the conflict tends to the reproduction of mechanisms of domination, revealing the non-recognition of the right of the homeless to occupy these public spaces.

TO THE EDGE OF THE URBAN LANDSCAPE: HOMELESSNESS AND THE POLITICS OF CARE

Author: *Bart van Leeuwen**, Radboud University Nijmegen, The Netherlands

Keywords: ethics, homelessness

Abstract: In political theory homelessness is left relatively unexplored. However, it is a problem that millions of people in the developed world have to deal with on a daily basis. In this paper I will argue that the pluralizing and the liberal approach to homelessness are deeply problematic from a moral point of view. I will defend a qualified version of the care approach instead. The pluralizing approach argues that the homeless increasingly are excluded from the public sphere as a result of homogenous conceptions of it. Hence the call for the "right" of the homeless "to the city," that is, the right to dwell and exist in public (Mitchell, 2003; Feldman, 2004; Arnold, 2004). The liberal approach argues for the importance of recognizing agency by accommodating the spatial preconditions to exercise freedom (Waldron, 1991). However, homelessness is neither an internally valued group identity, nor an authentic plan of life that calls for liberal "respect". It is a tragic condition that is the result of structural as well as individual causes. For that reason I will defend a version of the care approach (cf; Noddings, 2002), an approach that focuses on the particular needs of the homeless and that allows for certain types of coercion. Practices of care and reintegration, however, run the risk of a degrading construal of the homeless as "helpless victims." This worry needs to be addressed.

YOUNG PEOPLE IN COASTAL RESORTS: THE REGULATION AND CRIMINALISATION OF "YOUTHFUL" BEHAVIOUR IN PUBLIC SPACE.

Author: *Sarah Tickle**, Liverpool John Moores University, United Kingdom

Keywords: coastal areas, governance, public space, regulatory state, social exclusion, young people

Abstract: The governance of young people in public space and on the streets, in particular, is not a new phenomenon. The visibility of young people in certain "spaces" has evoked anxiety over the last two centuries, giving rise to various ways to regulate,

control and manage their presence in urban space. This paper will outline key findings from the ESRC sponsored doctoral research using extracts from interviews and visual data with young people, to reveal how particular constituencies of young people in public space are labelled, controlled, regulated and excluded.

Two coastal resorts, one in England and one in Wales, were consciously chosen to explore how social class frames young people's experiences and perceptions. By selecting one relatively affluent and one disadvantaged coastal resort, significant differences in how young people were "policed" in public space were revealed. The paper aims to pose some important new questions – in relation, for example, to the differential (and perhaps counter-intuitive) experiences of "being policed" by the two groups of young people in contrasting settings. It will argue how spaces within public space are exclusionary and how this impacts on young people's engagement within their own locality.

The paper also examines the "problematization" of young people in public space and the criminalisation of "youthful" behaviour. Exploring the ways in which young people are regulated by the state, police and "others" contributes to wider discussions about the punitive regulation of public spaces and the regulation and criminalisation of "youthful" behaviour in public space.

SLOT3 WHOSE RIGHT TO THE CITY? (3)

Chair: *Antonin Margier*

Schedule: Monday, 31 August, 17:15–19:00

THE RIGHTS-BASED IMPLICATIONS OF THE PRIVATISATION OF PUBLIC SPACE IN CITIES OF THE SOUTH

Author: *Graham Thomas Coggin**, University of the Witwatersrand, South Africa

Keywords: human rights, public space

Abstract: Public space is key in allowing people to appropriate, inhabit and participate in a city and its processes. Without public space, a city becomes overwhelmed by a network of private property, in which space is commoditised and characterised more by its exchange value than its usage value. In this regard, much has been written about how the privatisation of public space infringes the right to the city. In this paper, I aim to take this further, by looking at how the privatisation of public space infringes justiciable rights. This allows the right to the city to find concrete application within the institutional framework of domestic constitutional law as enforced by the judiciary. The courts, in other words, become the forums in which competing claims to the right to the city are facilitated and haggled over in terms of a bill of rights which, through a process of negotiation, has gained legitimacy among groups with different interests and agendas. I then look at how the privatisation of public space has very real and direct implications on the rights of those marginalised by such spaces. This is done against the backdrop of a history of spatial apartheid, as well as within the contemporary context of emerging, globally-competitive cities in developing countries.

RECLAIMING THE CITY FROM OUAGADOUGOU'S DISPLACED RESIDENTS

Author: *Félix Lefebvre**, Université Lille 1, France

Keywords: marginalisation, right to the city, spatial justice, urban legitimacy, urban regeneration

Abstract: The concept of spatial justice examines the inclusion of social inequalities in a spatial context, and the production of a specific spatial framework adapted to social situation. Thus, it challenges fair and equitable distribution in space of valued resources and opportunities to exploit them. In many southern cities, urban policies have produced discriminations on the location and the distribution of urban resources, especially by population relocation and the production of segregative urban structures. These situations have led people to become aware of these inequalities and claim their right to the city. But beyond political movements, it matters to consider the construction of urban legitimacies and the awareness of citizenship. In Ouagadougou, Burkina Faso, the inner city renewal caused massive population re-settlements towards suburbs, and give rise to an opposition of urban standards between a "showcase city" promoted by international actors and urban margins with illegitimated way of being citizen. However, unlike other African cities, this segregation does not give rise to an organized reclaiming about right to the city issues. Is this enough to assert that reclaiming access to public spaces from Ouagadougou's dwellers does not exist? The inhabitants' way of life is disqualified by the land transaction, and they become socially and spatially marginalized. But exercising the margin can result in an awareness of urban condition, which reflects in practices and representations. What are the dynamics of these urban practices and representations and how are they organizing (or not) the policies promoted standards?

RIGHT TO THE CITY IN AUTHORITARIAN CONTEXT: URBAN PRACTICES AND ORDER

Authors: *Amandine Spire**, University Paris Diderot, France; *Karine Ginisty**, Paris 1 Panthéon Sorbonne, France

Keywords: Africa, right to the city, urban geography

Abstract: Within urban societies characterized by authoritarian practises of power, the right to the city is not mobilized neither as an academic or a militant category (Lefebvre, 1968; Uitermark, Nicholls, Loopmans, 2012; Kyumulu, 2013). City dwellers don't use public space as a support for claiming their rights to be from the city, of the city and in the city. However, this contribution will aim to show the relevance of introducing the right to the city as an analytical category, in the authoritarian urban contexts, in order to consider the very large production process of urban norms. The invisibility of city dwellers' strategies for staying in the city leads us to focus on the right to the city beyond political expression and public claims for rights. It implies all urban practices and public action, taken in their interactions. Two case study located in sub-Saharan Africa will help us to address these issues. The first one deals with the strategy of spatial invisibilisation of the prostitutes in Maputo (Mozambique) so as to stay in city, based from a fieldwork conducted in 2015. The second one seeks to renew the debate on eviction by paying attention on the process of normalisation, from Lome (Togo), with data collected in 2014. This reflection is taking part of a collective and comparative program "reconsidering right to the city from the South" (founded by an emergence program, city of Paris).

STANDARDIZATION OF A PUBLIC PARK IN ISTANBUL

Author: *Helin Karaman**, France

Keywords: public space, urban planning

Abstract: The main goal of this presentation is to study a public park in Istanbul, called Topkapı Kültür Parkı. It takes place in the former location of a bus station. After the moving of the bus station in 1994, the process to develop and control the public space was difficult. Until 2002, the informal flea market, which was around the bus station, was still in place. According to the municipality, it concentrated undesirable populations who should be ousted: young glue sniffers (tinerci), drug addicts, thieves, prostitutes and alcohol consumers. Army was required to exclude undesirable populations and, eventually, in 2004, Topkapı Kultur Parkı was set up to pacify the public space. This new form of public space should lead to good uses (i.e. those accepted by the municipality) and prevent misuses. According to managers, everyone is welcomed in the park, provided that you observe the rules: it is forbidden to use samovar (a kind of big teapot) or mangal (an outdoor grill), forbidden to consume alcohol, you must have a behavior consistent with morality and there is prohibition of informal trade. The guarantors of these good practices are the watchmen of the park. Municipal rules do not really define the line between the good and the bad behavior, it is more a matter of interpretation by watchmen. Development of public spaces is a tool for the Municipality of Istanbul to change the practices of the metropolis' inhabitants, instilling what are accepted practices and the others, so it could be said that the right to the city belongs to ideology of municipal authorities, but also depends on other factors (visibility of a touristic place, interpretation by applicants, etc.).

SLOT4 WHOSE RIGHT TO THE CITY? (4)

Chair: *Lucas De Melo Melgaço*

Schedule: Tuesday, 1 September, 08:30–10:15

BLURRING THE BOUNDARIES BETWEEN PUBLIC AND PRIVATE SPACE: THE CASE OF THE RESTAURANT DAY

Authors: *Sirpa Tani**, University of Helsinki, Finland; *Noora Pyyry*

Keywords: everyman's right, public space, restaurant day, spatial justice, urban space

Abstract: "Restaurant Day", an event created by a small group of people in spring 2011 in Helsinki, has rapidly become an international phenomenon. It is a food festival happening four times a year when anyone can set up a restaurant for a day. Restaurants can be opened anywhere: at home, at the office, on a street corner, in a garden or inner courtyard – only imagination is the limit, as is defined on the website of the event.

In this presentation we explore the Restaurant Day as a way of challenging some general assumptions of appropriate ways to use urban space. Pop-up restaurateurs bring elements of home and private occasions out to the streets, or, as many of them do, they open their homes for strangers by inviting them for a meal. With these actions, they stretch the boundaries between public and private spaces. We will analyse this phenomenon by applying the Nordic concept of "Everyman's Right", originally targeted to nature areas, to urban spaces. In the process of updating the concept, we have re-named it as "Everyone's Right". Based on our photo-walks conducted during recent Restaurant Days, we will analyse some cases where "everyone's right" is in action and highlight the importance of diversity and creativity in everyday life. When urban spaces are open for various ways of use them – or, for dwelling with them – they become more easy-going and tolerant. With the concept of everyone's right we propose a new approach to thinking about spatial justice in the city.

BORDERING AND RIGHTS TO THE CITY: THE CASE OF A MULTIETHNIC NEIGHBORHOOD IN BUDAPEST

Authors: *Krisztina Keresztely*, Hungary; *James W Scott**, University of Eastern Finland, Finland; *Tünde Virág*

Keywords: bordering, ethnic segregation, exclusion, roma issues, urban renewal

Abstract: The paper is concerned with Roma rights to the city and how socio-ethnic issues have been framed in conjunction with urban development. We will analyse the way in which local urban renewal policies have dealt with the challenge of multi-ethnicity in central Budapest, through among others, practises of border-making. How these urban development practises can be evaluated in the context of European tendencies? How local policies vis-à-vis Roma minorities circumvent European objectives concerning the empowerment of Roma communities?

Our research is based on an empirical study conducted in a traditionally multi-ethnic area in the 8th District of Budapest. Magdolna neighbourhood became the focus of Budapest's first socially integrative urban renewal programme, financed since 2007, by EU structural funds. This is the poorest part of Budapest's inner city, often represented as the "Roma ghetto of capital" although "ghettoization" is limited to some streets. The neighbourhood is becoming more multicultural and first signs of gentrification can be discerned.

The most important results of our work indicate that the visible effects of the integrated urban renewal programme cannot hide the political intention of local government to change the neighbourhood's character and with it its present population. The aim is clearly to gradually push out visibly "problematic" groups, poor Roma families in particular, by redrawing social and spatial borders between the different ethnic and social groups that live in the neighbourhood

ON THE EDGE OF THE NEW PUBLIC PLACES – CITY CENTER REHABILITATION AND MARGINALISATION IN THE DOWNTOWN OF KAPOSVÁR, HUNGARY

Authors: *Jambor Viktor**, University of Szeged, Hungary; *Katalin Vedrédi*, University of Szeged, Hungary

Keywords: downtown, homelessness, planning process, social exclusion

Abstract: Urban renaissance in East-Central Europe brought about changes these days not only in the renewal of rundown physical environment (buildings, public spaces), but also in the life of residents. The members of the social class who are excluded from society have not been living under better conditions even after the rehabilitation of the city. The gentrification process which was typically controlled by the (local) state in the post-socialist area also led towards reproduction of social inequalities. The stigmatisation of the residents and the space of everyday life has put the locality in train and given a green light to gentrification and trendification. In the presentation we would like to introduce the results of the analysis we have done related to the rehabilitation of the downtown of Kaposvár and we also present the problems of the planning and practical implementation of the renewal process. We highlight the local practices that have led towards the release or towards the emergence of the stigmatisation and marginalisation and we focus on the exclusion of the homeless from the new public spaces. We used qualitative methods (interviews and content analysis) to answer our main question: why has the renewal of the historical downtown of the city involved additional marginalisation, exclusion of the stigmatized social class from the new public spaces?

WHOSE RIGHT TO PUBLIC SPACES IN THE CITY? RECOVERING SPATIAL CAPITAL BY THE USE OF COLLABORATIVE MAPPING

Author: *Federica Burini**, University of Bergamo, Italy

Keywords: participation, public space, spatial justice

Abstract: The paper aims to decline the concept of spatial capital for accessing the question “Whose right in the city”. Spatial capital is conceived as the stock of knowledge and experiences that human beings have accumulated during time, that can be recovered by the use of collaborative tools and methodologies. It is a form of citizen science, a set of useful information both for the advancement of scientific research and for the design and territorial action in a sustainable perspective. Involving all the forces operating in cities public spaces, it is possible to take into account the needs of different city users (commuters, immigrants, students,...) and transform spatial capital from individual assets into common goods. As it is known, the foundational processes of governance and participation, however, require a commitment in terms of time and the operational translation of the concepts and principles into good practices. The paper presents the methodological approach followed within the Diathesis Lab of the University of Bergamo in Italy. In particular we will show the process activated in the city of Bergamo called “BG Public Space”, a collaborative webmapping system promoted for the regeneration of public spaces in the city of Bergamo accompanied by a real process of participation of citizens and city users.

P61 PRINCES, NATIONS AND TERRITORIES: MAPS AS EXPRESSION OF POWER

Organizers: *Edoardo Boria*, *Alessandro Ricci*

Location: Room D

SLOT1

Chair: *Alessandro Ricci*

Schedule: Monday, 31 August, 17:15–19:00

FALSIFIABILITY OF CARTOGRAPHY: MARTINI AND NIEUHOFF (1655-1665).

Author: *Michele Castelnovi**, Centro Studi "Martino Martini" di Trento, Italy

Abstract: In 1655, an Italian Catholic, Martino Martini, published the first atlas of China based on geographic and cartographic information developed over the centuries by Chinese cartographers. Immediately, in the following year (1656) a Dutch Protestant, Johan Nieuhoff, travelled from Guangzhou to Beijing, to check the reliability of the information Martini for the V.O.C. He gave all his knowledge to his brother, Giving confirmation to the Prince. The cartography of Johann Nieuhoff as a test of falsification of information provided by Martino Martini on China (1665). Hendrick Nieuhoff. Hendrick published a map in a book, titled *Het Gezantschap der Neerlandtsche Oost-Indische Compagnie, aan den grooten Tartarischen Cham*, by Jacob van Meurs in 1665. This paper aims to compare the work of these two authors, and to assess the importance of the Dutch confirmations to the geographical and cartographical information provided by the Italian traveller about China.

Bibliography: MARTINI, Martino, *Opera Omnia*, vol. III, *Novus Atlas Sinensis* [1655], con note di Giuliano Bertuccioli, Trento, Unitn, 2002, con un volume di complemento intitolato *Tavole*.

Nieuhoff, Johan, *Het gezantschap der Neerlandtsche Oost-Indische Compagnie, aan den grooten Tartarischen Cham, den tegenwoordigen keizer van China*, 1665.

Blussé, L. & R. Falkenburg, *Johan Nieuwhofs beelden van een Chinareis, 1655-1657*. Middelburg, 1987.

Massimo Quaini e Michele Castelnovi, *Visions of the celestial empire. China's image in western cartography*, Genova, Il Portolano, 2007

Castelnovi, Michele, *Il primo atlante dell'Impero di Mezzo. Il contributo di Martino Martini alla conoscenza geografica della Cina*, Trento, Centro Studi Martino Martini, 2012.

CONTEMPORARY ART AS A VISUAL EXPRESSION OF POWER

Author: *Cristina Giudice**, Italy

Abstract: My paper is about contemporary art. If maps are expressions of power, some works of art correspond in the same way. My research tries to examine through the representation, in which way politics and national identities are built. In some works of Maja Bajevic, Mona Hatoum, Zarina Hashmi the use of the map is a visual expression about the discursive practices of power: these works put on the stage with the different instruments of the visual, the mechanism which connects the geographical representation and power politics and make the construction of the symbolic visible. Art permits us to discuss in a critical way, how experiences and representations are part of the complex process in becoming, in time and in space, constructed by hegemonic and contra-hegemonic discourse. For me art can be considered the Third Place (Homi Bhabha), a way to investigate history, society and politics with a different language; with contemporary art it is possible to analyze the relationship between the different kinds of representations and the construction of power.

ETSCHREGULIERUNG: RECLAMATION, RIVER EMBANKMENT AND THE CONSTRUCTION OF MODERNITY IN AUSTRIAN SOUTH TIROL

Authors: *Matteo Proto**, University of Trento, Italy; *Alessandro Ricci*, Italy

Abstract: The aim to regulate river Etsch/Adige in Austrian County of Tirol south portion arose at the end of XVIII century. Several projects followed one another and the works were almost concluded by the end of XIX century.

In the same period many other European rivers - like the Rhine in Germany - were concerned in the same period with similar projects. Swamps and marshes eluded cadastral calculation, therefore avoiding taxation and made difficult the strategic positioning of armies and fortification. In this sense they prejudiced the disciplined order required from modern state. Water itself was an irrational and unpredictable element, which needed to be contained. Since Renaissance cartographic technique advancement together with the progression of statistical inquiry allowed a new understanding of territorial rule. Maps and dataset were not just the means to realise these projects but became the archetype of a radical land transformation. Straight roads and channels, reclaimed lands were the reflection of the imaginary lines depicted on the map. It is not by chance that the Adige river rectification and embankment war strongly related to the Brennerbahn construction, the railway line between Innsbruck and Verona.

The same process involved property, administrative and political borders: modern territorial state conceived land reclamation and border demarcation as a whole.

This paper examines the different embankment projects with related maps which along a century deeply transformed the Adige valley geography.

MENTAL MAPS OF THE WORLD OF THE CHILDREN IN LADAKH – FIRST RESULTS

Authors: *Tadeusz Siwek**, University of Ostrava, Czech Republic; *Zuzana Hartmannová*

Abstract: Himalayan Ladakh is one of the most isolated region in the world. But it is in the centre of interest among charitable organizations of many developed countries. Volunteer teachers from different countries are visiting this area more and more last time. Some of them are Czechs of organization of Slezská diakonie (on the basis of Silesian Evangelical Church of Augsburg Confession). Volunteers of this organization have had a good occasion to recognize different ideas of the World among children in Ladakh. This paper presents first results of the analysis of their mental maps.

THE REPRESENTATION OF TRANSYLVANIAN ETHNIC DISTRIBUTION ON MAPS – DIFFERENT WAYS OF READING AND INEVITABLE SOURCES OF CONFLICT?

Author: *Áron Szentpáli**, Eötvös Loránd University, Department of Social and Economic Geography, Hungary

Keywords: ethnic conflict, ethnic identity, map, Transylvania

Abstract: The aphorism “read me carefully, follow me closely, trust me not!” referring to thematic maps is especially true for representations showing ethnic distribution. In this paper an attempt is made to compare two significant products of Hungarian ethnical mapping: Pál Teleki’s Carte Rouge (1919) and Károly Kocsis’s Ethnical Map of Transylvania (1997). Although elaborated at different times and with different goals, the two maps generated repugnance on the Romanian side, both of them invoked critical reactions (the former was criticized by Laurian Someșan, the latter by Petre Deică) especially for their specific language and their hidden message. In my paper I not only analyse these critical observations but also place them in a broader social and political context.

Nevertheless, the reception of both ethnical maps suggests that a simple representation of the Hungarian minority is sufficient to arouse resistance in the members of non-Hungarian ethnical groups. Over-sensitive reactions point to the fact that Hungarian cartography has to view ethnical mapping from a different angle. The elaboration of a map should never become a research objective in itself, but a tool for accomplishing a meticulously elaborated goal. Or else, scientific research in this field and the discipline itself may become a source for continual and insoluble interethnic conflicts. In the paper an attempt is made to point out the delicateness of the topic and to emphasize the cartographers’ responsibility when elaborating their work and the importance of choosing adequate methods in this process.

CARTOGRAPHIC SILENCE IN CONTESTED GEOGRAPHICAL SPACES: THE CASE OF CYPRUS AND EAST CENTRAL EUROPE

Authors: *Patrik Tátrai**, Geographical Institute, RCAES HAS, Hungary; *Ágnes Erőss*, Geographical Institute RCAES HAS, Hungary

Keywords: cartographic silence, power struggle, power-strategies

Abstract: Maps generally and primarily provide clear orientation on certain territory for locals and foreigners as well. Beyond the practical function, maps should be understood as socially constructed texts. Map as a text transmit messages for the reader about – inter alia – politics and supremacy over a territory, and are tools for underpinning territorial claims or justification of possession (Harley 2001) or with other words maps are parts of power-strategies.

In contested geographical spaces, it can easily happen that a road map will not help us to find the exact street or direction, because it reflects only one group's narrative about the space. In such cases maps serve more the political and less the geographical orientation by providing or silencing information (e.g. borders, place names).

In our paper we would like to show in which ways and by which methods cartographic silence is practised in contested spaces by contrasting actors. Furthermore we would like to present how maps become instruments of power struggle and power-strategies in open/frozen/hidden geopolitical conflicts.

Based on the examples from Cyprus and East Central Europe, we argue that maps became subject to represent conflicts by visualization of non-official signs or even non-visualization of otherwise official signs in the space. All this process challenges the original function of map and rather turns it into a political claim.

P62 FROM GLOBAL NETWORKS TO LOCAL MARKETS – THE CHANGING GEOGRAPHIES OF CONSUMPTION

Organizers: *Eva Fekete Gadoczine*, *Erika Nagy*

Location: Room I

SLOT1

Chairs: *Eva Fekete Gadoczine*, *Erika Nagy*

Schedule: Wednesday, 2 September, 15:00–16:45

“SPICES OF SPACES”. FROM GLOBAL TO LOCAL THROUGH CONSUMPTION

Author: *Melissa Espallat Bencosme**, Technical University of Madrid (UPM)q, Spain

Keywords: (de)territorialization, borderscape, capital flows, eating, multidimensionality, relational

Abstract: Consumption fulfills a cultural as well as an economic need. The nature of this need becomes clearer if we look at the most direct and simple form of consumption: eating. Seeing it as a phenomenon in which are inherent concepts of “place”, “habit”, “relations”, means being conscious than small habits could have repercussions on a big scale.

From Global Networks to Local Markets: this research starts from the study of the concepts of border, borderline, Borderscape, within the Landscape Lab framework at the Technical University of Madrid, with a case study on the Gibraltar Strait, initially between the borders of Spain and Morocco, which is an issue that in has gained importance in the last years at social and geopolitical levels because of illegal migrations, and of the conflicts derived of them. The work proposes an analysis through food (and its consumption) as a Relational Act -part of the contemporary social, productive and commercial system-, space for human relations that, potentially, has possibilities of different forms of exchange, opposed to those existing in current political, social and cultural levels.

The work is centered, deductively, in saffron, which is seen as a “spice of spaces”: a minimal element through which the complexities, the relationships of consumption, and processes of (de)territorialization have a possibility to be exemplified. Through these matters, ideas of “border” and “borderline” are put into crisis to find new meanings and behaviors from a multidimensional level according to postmodern constructions of space, time and geography.

HOW DO SOCIAL INNOVATIONS OF LOCAL FOOD SYSTEM RESHAPE RURAL SPACES?

Author: *Eva Fekete Gadoczine**, University of Miskolc, Hungary

Keywords: local food, ruralspace, social innovation

Abstract: In addition to the beneficial effects of food mass production and globalization (expansion of assortment and decline in prices), adverse effects have depressing impacts on rural societies. Many rural areas have shrunk both economically and demographically; consumers have lost their confidence in food; environmental impacts of the applied “efficient” technology and transportation have become dangerous; the loss of food sovereignty has caused economic and political dependency.

Production and consumption of food locally aim to answer social and environmental challenges created by the market. That is why it can be seen as social innovation. Moreover, appearance of social enterprises and other community economic development tools, as well as the connection with local culture stress a social innovation character of producing and consuming local products.

Social innovations related to local food system should be aware their effects on production of rural space. They may change the land use system and effect on regional identity, increase local employment and capabilities of local communities, expand the local market, create new networks within and between rural and urban spaces, create new (or old?) type places of consumption, improve local human resources.

Our research is based on the concepts of sustainable development and social and solidarity economy and aim to add elements for a resilient rural policy. It is focused on the roles of local food production and consumption in revitalization of rural areas, as well as the barriers needed to remove and the opportunities and methods to generate social innovations dealing with these issues.

WHERE TO LIVE? – CHANGING GEOGRAPHY OF HOUSING MARKET IN THE PERIOD OF CRISIS

Author: *Gabor Nagy**, Research Centre for Economic and Regional Science, Hungary

Keywords: housing, Hungary, mobility, price levels, regional markets, spending capacity, transactions

Abstract: After the beginning of crisis (2008), the housing markets were “frozen” in Hungary. The number of transactions less than halved, the mobility of the people were declining in parallel the increasing unemployment rates and limitations in wages and subsidies. In that period, the new house buildings were decreasing, undergone the level of the Great Depression (1929-1933).

The regeneration process seems very slow and not exempt from stagnation and falling down periods. There are several causes of that: the uncertain increase in world economy, the special problems of the EU and more intensely the euro-zone, however, the national policies were determined hardly the trends, as well. The high level of overall indebtedness of the country, the central government, the local governments and households marked the milestones of different policies, in general. The special phenomena of these processes was the high share of liability not in national currency, mostly in CHF and EUR, which proved to be highly stable comparing HUF, the national currency.

The above mentioned tendencies involve a partially changed spatial structure in the whole housing market, including building and buying, we researched. However, the effects of crisis were clear in the whole country (decreasing number of newly built houses, reducing prices), the level of decrease and the regeneration paths were highly different region by region. In our presentation we try to depict the new phenomena, new inequalities, new geography of housing market in a New Member Country in the period of global economic crisis.

THE RISE OF THE REGULATORY STATE AND PRODUCTION OF UNEVEN CONSUMPTION LANDSCAPES IN EAST AND CENTRAL EUROPE

Author: *Erika Nagy**, HAS, Hungary

Keywords: East and Central Europe, regulatory state, retail, uneven development

Abstract: In the past three decades, subsequent changes occurred in institutional practices and the scalar organisation of the state throughout East and Central Europe (ECE). The processes were embedded into the global trends of state restructuring such as rise of the regulationist state/the devolution of state power rooted in changing state-market relations. The slowly emerging and inconsistent regulatory framework of retail and consumption in ECE reflected the above trends as well as the particular political and the socio-cultural contexts of the emerging markets, and contributed to the development of highly uneven consumption landscapes shaped dominantly by corporate strategies. My paper is focused on the critical analysis of political discourses over the regulative role of the state in these specific fields and on the related institutional practices. In particular, I focus on the ways and on the contexts of interpreting socio-spatial inequalities in relation to consumption issues. I argue for

- considering regulation regimes as the products of shifting power relations that had been dominated by the coalitions of national political elites and supra/transnational agents in the transition period exploiting the structural deficiencies and ideological potentials of the post-shortage economies and later, by the rise of domestic capitalists' groups (retailers, developers, producers) that pressed national political elites to renegotiate the regulation of the crisis-hit markets;
- understanding how the problems of socio-spatial inequalities and the issue of citizenship (national, local, etc.) were exploited by each powerful group to realize their strategies – reproducing unevenness.

I discuss the Hungarian context more in depth as a “laboratory” characterised by highly concentrated and contested market relations and by unprecedented direct (regulative) interventions of the nation state from 2010 on.

The research is supported by the National Research Fund, Hungary (OTKA K109269) and also by Marie Curie ITN RegPol2 project.

Organizer: *Zaiga Krisjane*

Location: Room B

SLOT1Chair: *Zaiga Krisjane*

Schedule: Tuesday, 1 September, 17:15–19:00

CREATING SPACE WITHOUT BORDERS? SHAPING TERRITORIAL AWARENESS OF PEOPLE IN CROSS BORDER REGIONS – CASE OF THE POLISH-GERMAN CROSS BORDER REGIONAuthor: *Izabela Daria Bal**, University of Wrocław, Poland

Abstract: Social aspects of cross border regions has been the field of research for many scientific disciplines, such as ethnology, ethnography, geography, history, law and sociology. The main factor determining the emergence of a varied cross border regions were migration and settlement, often being the result of economic and political decisions. What is characteristic of the Polish-German cross border region, is that its populated by groups having different attitudes, models, traditions, religious convictions, lack of a dominant regional group among migrants, lack of the continuity of historic tradition, high levels of emigration outside the region. At the same time, significant richness and multitude of attitudes, as well as tolerance and outward openness, near border location itself, economic and interpersonal integration with neighbors from the other side of the border reinforce Europeanization processes.

In the Polish-German borderland many cities had to deal with problems arising from deindustrialization, suburbanization and demographic transitions. In the western part of the country, the inner and outer cities depopulated very quickly. It is important to carry out a spatial development policy in cities in harmony with their demographic development.

Aspects that constitute the main axis of considerations are the issues connected with shaping territorial awareness of the population in cross border regions and their influence on creating a social capital with special reference to spatial self-identification, approach to foreigners settling in a given location, declarations regarding envisaged place of future residence or the recognition of the value of landscapes.

RETIREMENT VILLAGES: A CHANCE FOR A VILLAGE RENEWALAuthors: *Branislav S Djurdjev**, University of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia; *Daniela Arsenovic*, University of Novi Sad, Faculty of Sciences, Department of Geography, Tourism and Hotel Management, Serbia; *Bojan Djercan*

Keywords: demographic changes, population ageing, retirement villages

Abstract: The paper discusses an evolving way of care for elderly, which is a new way of growing business, too. Population ageing of modern world changes our everyday life in many ways. Developed countries are trying to provide accommodation specifically designed for their own elderly residents. Developing countries are also targeting citizens from developed countries offering the same standard of living for much lesser amount of money. In both cases a new way of business is evolving. The over-60s now have 80 per cent of the nation's wealth in Great Britain and the similar situation is in all other developed countries. Increasingly, those that can be buying into the type of retirement 'villages' favored in the States, South Africa, Australia and New Zealand. Poorer portion of population accommodates themselves in developing countries like Mexico, Thailand, and Philippines. In both cases it is a powerful tool for rural regeneration.

POSSIBILITIES OF STUDY OF THE MORTALITY CONVERGENCE AND DIVERGENCE AMONG SELECTED COUNTRIES: CASE-STUDY OF THE POST-COMMUNIST COUNTRIES' APPROACH TO THE REST OF THE EUROPEAN COUNTRIESAuthors: *Dan Kašpar**, Charles University in Prague, Faculty of Science, Department of Demography and Geodemography, Czech Republic; *Klára Hulíková*; *Pavel Zimmermann*

Keywords: demographic changes, Europe, mortality, The Czech Republic

Abstract: Studies focused on convergence and divergence tendencies of any indicator provide a unique information about its development in time as well as in space, and could be taken almost as a separate field of research in demography and also in other disciplines.

The main goal of this paper is to find and apply a transparent method of measuring and analyzing the convergence tendencies of one selected population to several others. It is illustrated in the case study, in which we analyze the convergence tendencies of mortality of a selected European country (the Czech Republic as a representative of rapidly developing post-communist countries) to other European countries with lower mortality.

Data from 1991-2009 from the Human Mortality Database was used, with only ages 30 and above involved. The method of analysis is based on the expression of mortality trends in the past, their simple extrapolation and estimation of the time theoretically needed for equalization of the estimated regression functions. In the case study, the age interval was covered by the temporary life expectancy between ages 30 and 65 and life expectancy at the age of 65. The trend of the first one was fitted by the logistic function, the other one by simple linear regression.

Based on the results, the “nearest demographic neighbors” for the Czech Republic according to mortality development is Denmark. The proposed method could be simply enriched for many other indicators or used for any other population or studied process.

DIVERSIFICATION OF MIGRATION PATTERNS IN PERIPHERIES OF RURAL LATVIA

Authors: *Zaiga Krisjane**, University of Latvia, Latvia; *Elina Apsīte-Beriņa*; *Maris Berzins*; *Ineta Grīne*, Latvia

Keywords: Latvia, migration, peripheral rural areas

Abstract: The last two decades have witnessed the demographic and socioeconomic decline of many rural regions in Central and Eastern Europe. Migration is clearly the prime driver of demographic change in Latvia. Moreover, the decline in fertility rates is reinforced by the negative effects of out-migration, especially from the remote and sparsely populated rural areas. On the other hand, the deindustrialization and the restructuring of agriculture have resulted in large-scale job losses, declining standards of living and the overall rural depopulation. Many areas in periphery of Latvia are facing unprecedented change as a consequence of mentioned processes.

Our study examines population changes, migration behaviour and compositional differences of rural residents and is based on field work and analyses survey data from two remote rural case study areas in Northern (Vidzeme) and Eastern (Latgale) Latvia. We attempt to compare rural residents to provide an overview of migration patterns to the different types of areas in rural periphery, on the basis of the characteristics and motives of the people migrating there. We used a survey of local residents from randomly selected households that was conducted within 8 rural municipalities in 2013 and 2014.

On the basis of the results, we try to prove that looking at differences in rural areas and at differences in the people they attract or lose can provide a more complete picture of migration patterns in remote countryside. Our research confirms that migration flows are linked to broader processes of rural transformation which are producing an increasingly differentiated countryside.

P65 LOCAL RESPONSES TO GLOBAL CHALLENGES: MANAGING SUBNATIONAL ACTORS IN THE AGE OF TRANSFORMATION

Organizer: *Alexander Sergunin*

Location: Room M

SLOT1

Chair: *Alexander Sergunin*

Schedule: Monday, 31 August, 15:15–17:00

THE NORWEGIAN-RUSSIAN BORDER MANAGEMENT SYSTEM IN THE CONTEXT OF THE 2010 AGREEMENT ON THE FACILITATION OF THE VISA REGIME FOR THE BORDER RESIDENTS

Author: *Alexander Sergunin**, St. Petersburg State University, Russia

Keywords: border residents, visa-free regime

Abstract: This study aims at examining how the 2010 Norwegian-Russian agreement on the introduction of a de facto visa-free regime for the border regions' residents both on the Norwegian and Russian sides is being implemented. Particularly, the paper focuses on how the border guard, consular and customs services of the two countries cooperate with each other to implement the above agreement. The successes and bottle-necks are identified and analyzed. The implications of the 2010 agreement for the Kirkenes-Nikel twinning project and for the Norwegian-Russian cross-border cooperation are examined. The “spill-over” effect of the Ukrainian crisis for the Norwegian-Russian border management system and regional cooperation is studied. The prospects for the dissemination of the best border management practices in other border regions are discussed.

NORWEGIAN-RUSSIAN MARITIME BORDER MANAGEMENT IN THE CONTEXT OF THE 2010 AGREEMENT ON THE DELIMITATION OF THE BARENT SEA

Author: *Valery Konyshev**, Saint-Petersburg State University, Russia

Keywords: crisis, cross-border cooperation

Abstract: The paper aims at analysis of the Norwegian-Russian maritime border management system that is based on the 2010 Treaty on the Delimitation of the Barents Sea. The paper identifies both positive experiences and problematic areas. Particularly, the cooperative practice of the two Coast Guards is examined. On the other hand, the problems pertaining to the regulation of fishery, shipping, exploration and exploitation of the hydrocarbon resources of the Barents Sea are analyzed. The need to clarify and settle the status of the Svalbard archipelago is discussed. The practical recommendations on the improvement of the Norwegian-Russian maritime border management system are suggested.

URBAN SHRINKAGE IN A SHRINKING COUNTRY: RUSSIAN SOUTHERN REGIONS BETWEEN 1995 AND 2012.

Authors: *Elena Batunova**, Politecnico di Milano, Italy; *Giovanni Perucca*

Keywords: economic inequalities, economy, Post-Soviet countries, postsocialist transition, Russia, shrinking region, urban changes

Abstract: In almost all former communist countries, the transition from a planned to a market economy led to a territorially unbalanced process of growth. Natural population decline that began in Russia at the end of the Soviet period has been compounded by dramatic transformation of the state economy. The spatial concentration of foreign direct investments into few leading cities (mainly the counties' capitals) generated, jointly with change in the internal state migration policy caused significant internal migration flows. In combination with a dramatic drop in the birth rates, it provoked a process of shrinkage in many second and third-tier cities. The extremely uneven economic development occurred within the country led to a severe worsening of the social inequalities across regions. While these mechanisms have been already discussed in the case of Central and Eastern Europe, very little is known about the evolution of urban size in Russia. The present paper is aimed at filling this gap through a case study of the Southern Russia that was very attractive for internal migrants during the deep economic crisis of the first post-socialist decade. Nonetheless, shrinkage is a widespread phenomenon in this region also. The goal of this work consists in identification of the interrelationship between economic development and demographic changes in Russian Southern regions in the last 20 years. Finally, some considerations involve the role played by the absence of any urban development strategy in the process of urban shrinkage.

THE TRANSFORMATION OF CENTRAL RUSSIA'S SMALL TOWNS' ECONOMICAL BASE AND RURAL-URBAN CONNECTIONS

Author: *Maria Gunko**, Institute of Geography Russian Academy of Sciences, Russia

Keywords: post-socialist city, rural areas, small towns

Abstract: According to the 2010 Russian population census - 70% of urban settlements have population size of 50 000 and less, and are considered to be small towns. They are home to about 15% of the country's population. Most of them are administrative centers of rural districts. In the Soviet times almost in every small town there were enterprises processing local agricultural or other resources depending on the area (timber and etc.). Often these enterprises were the basis of local economy, employing a large number of population. With the transition to market economy the economic development of small towns started to differ from one another depending mainly on the geographical location, well-being of the surrounding areas, human capital and institutional factors. In some towns the processing of local resources became a prerogative of small business. The large enterprises, if they have survived the crisis, were now able to construct their own chains of sales, and their resource hinterland expanded beyond own districts. Some enterprises arranged vertically integrated structures "from field to fork". In addition to local actors large Russian and international business penetrated into small towns. This often "broke" the historical connections within the area and led to the annihilation of local business. This work is devoted to Post-Soviet economic transformation of small towns in Central Russia. In addition to the analysis of statistical data on 210 small towns, a study of institutional factors was conducted on example of 6 small towns, located in the northern, mid and southern parts of Central Russia.

SLOT2

Chair: *Federica Burini*

Schedule: Monday, 31 August, 17:15–19:00

UNIVERSITY OF TECHNOLOGY IN MEDIUM SIZE CITIES TO FOSTER INNOVATION: THE CASE OF THE UNIVERSITY OF TECHNOLOGY OF COMPIÈGNE ECOSYSTEM

Authors: *Veronique Misseri**, Sorbonne universités, Université de technologie de Compiègne (UTC), EA 2223 Costech (Connaissance, Organisation et Systèmes Techniques), Centre Pierre Guillaumat - CS 60 319 - 60 203 Compiègne cedex – COSTECH, France; *Thierry Gidel*; *Michael Vicente*

Keywords: ecosystem, engineering, innovation, local to global, medium sized cities, organizational proximity, proximity, university

Abstract: Compiègne is a medium sized city, eighty kilometres north of Paris, close to a low-cost airport, with an historical heritage. This city host a University of technology, inducing a specific open mind regarding the relationships with industries. Two years ago, keys actors of economics, territorial and academics areas were gathered to facilitate the emergence of an innovation ecosystem. "Ecosystem" often refers to geographical proximity, interaction and interdependency of heterogeneous actors (Moore, 2006). The social and cultural dimensions were added. Therefore this ecosystem relies on the interrelationships among 4 areas: 1- Science and technology, 2-Industry and services, 3-culture and heritage, 4-urban, territory and social questions. It is considered as an analytical frame for understanding the territory's evolution, from the local to a global network.

In a medium sized city, a tension appears between political or institutional priorities and emerging projects not in straight line with these priorities... This article examines the choice of engineering as a focusing element in a multi-centric environment. Through engineering, the ecosystem introduces a concept of organized proximity (Rallet & Tores 2007) that gathers heterogeneous actors, impacting their trajectories, contributing to the emergence of a wide innovation ecosystem ranging from weak ties (Granovetter, 1985) to contractual partnerships. The emergence is facilitated by the fact that organizational proximity is often leveraged within social ties (Santamaria, 1999), cultural and economic networks that overcome the distances in a global network.

This article would contribute to the new evidence of the socio-territorial change in a knowledge based society of this medium sized city.

REGIONAL INTEGRATION AND TRANSPORT INFRASTRUCTURES IN CATALONIA. THE ROLE OF GIRONA AS MEDIUM-SIZED CITY

Authors: *Jaume Feliu**, Universitat de Girona, Spain; *Mita Castañer*; *Joan Vicente*

Keywords: Catalogne, development, high speed train, local governance, low-cost airlines, polycentrism, transport, urban changes, urban region

Abstract: Catalan regional space, formed by Barcelona and many medium-sized towns, is witnessing some changes that seem to bring about a greater urban and regional integration among its various cities. The causes and consequences of this process are closely related to great infrastructures, especially of transport.

The launch in 2013 of high-speed rail service between Lleida, Tarragona, Barcelona, Girona, Figueres and Perpignan has located these cities to a metropolitan travel time (less than an hour to Barcelona). The success of passengers, especially those of regional destination, suggests that HST is accelerating the trends that had already begun in the previous decades (residential expansion of the metropolis, growing attraction of Barcelona, specialization of medium-sized cities).

In a context of transformation of the relationships and roles between the cities, that may lead to an increasingly integrated regional system, decisions must be taken about how to organize the different systems of transport infrastructure as airports, ports and logistics centres, or other social infrastructure such as universities. The dynamics of cooperation and specialization will decide if this region tends to be a polycentric or a centralized organization.

We study the case of Girona to provide information and specific examples of how this process is happening, what are the critical areas that can influence local development and what is the role of local stakeholders in those changes.

ABSTRACTS – THEMATIC PANELS

T01 ECRITURES DU RURAL / RURAL WRITING

Organizers: *Mauricette Fournier, Marina Marengo*

Location: Room H

SLOT1 REPRÉSENTATIONS DU RURAL EN FRANCE ET AU CANADA / RURAL REPRESENTATIONS IN FRANCE AND CANADA

Chair: *Alessandra Bonazzi*

Schedule: Tuesday, 1 September, 15:00–16:45

DU ROMAN DE TERROIR AU ROMAN DE LA TERRE: CONTRADICTIONS ET COMPLÉMENTARITÉS ENTRE LITTÉRATURE POPULAIRE ET LITTÉRATURE “HAUTE” DANS LA FRANCE CONTEMPORAINE

Authors: *Marina Marengo**, Università degli Studi di Siena, Italy; *Marengo Marina*

Keywords: approche géo-littéraire, France, littérature populaire, roman rural

Abstract: Les chercheurs en sciences humaines ainsi que les littéraires qui ont choisi l'approche géo-littéraire en France ont souvent opposé la littérature «haute» à celle populaire et/ou de terroir.

Les deux typologies romanesques ne constituent en réalité que les revers de la même médaille. Il ne faut cependant pas négliger les profondes différences entre les deux. Le roman de terroir, consacré par l'affirmation de l'Ecole de Brive, est caractérisé par l'abondance, voire la redondance des mots et la linéarité de l'écriture. Il s'agit d'une littérature «à succès», qui ne fait que creuser ultérieurement le fossé avec la «vraie» littérature de la terre: celle qui de Georges Sand arrive directement à Michon et Bergounioux, mais aussi à Marie-Hélène Lafon, pour n'en citer que quelques uns.

Et pourtant, les deux sont complémentaires. Les Michon et les Bergounioux nous conduisent directement à l'essence de la campagne française, aux éléments fondateurs d'un monde agricole qui ne cesse pas de rechercher ses origines et ses attaches profondes. Les longues et parfois redondantes descriptions des romans de terroir permettent de suivre à la trace les processus profonds qui ont bouleversé les campagnes françaises au cours du dernier siècle.

Dans cette communication il s'agit de comprendre comment, par de chemins différents, deux écritures romanesques si différentes ont été et sont toujours à même de contribuer à la construction de l'imaginaire spatial de la France rurale, qu'il s'agisse de paysans et sociétés d'antan ou tout a fait contemporaines, de lectures individuelles ou bien de construction de politiques patrimoniales locales.

PIERRE JOURDE'S “PAYS PERDU”: ELEGY OR BETRAYAL?

Author: *Annie Jouan-Westlund**, Cleveland State University, United States

Keywords: cultural environment, landscapes, territorial consciousness

Abstract: In 2005, French contemporary critic Pierre Jourde published *Pays Perdu* dedicated to his isolated native village of Lussaud in Cantal, a rural farming area of Auvergne, France. Intended as a declaration of love for his native home and a pastoral elegy to the farmers, the book depicts the hardship and crude lifestyle in a village haunted by adulterous family secrets. Two years after the publication, the author and his family are insulted and violently assaulted by the book's characters. Ten years after the publication of *Pays perdu* that severed the author's relationships with his former neighbors, Pierre Jourde publishes a novel with a biblical title, *La première pierre* awarded the Jean Giono literary prize. In the essay, the Parisian iconoclastic critic expresses his self-criticism partly questioning his writing, partly convincing his reader of the legitimacy of his pictorial ode to the “lost country”. The presentation proposes to investigate the social, ethical and literary implications of Jourde's rural writing navigating between fiction, poetry and reality. In *Pays perdu*, the author betrayed rural community secrets meant to remain unuttered. The analysis investigates the literary depiction of the village and the power dynamics at play in the autobiographical work positioning the author as authority figure over the farmers who inspired his characters. It will also explore and address the limits of creative freedom when readers' expectations are not fulfilled and the writer is considered a traitor.

LE RURAL MIS À MAL DANS DEUX ROMANS DU TERROIR QUÉBÉCOIS ET LEURS ADAPTATIONS CINÉMATOGRAPHIQUES – SÉRAPHIN ET LE SURVENANT

Author: *Pascal Marie**, University of Toronto, Canada

Abstract: Avec les années de la crise québécoise, datée de 1930, la société rurale, prédominante depuis le XVII^e siècle avec la vague de défrichement et de colonisation du Canada-français, se métamorphose progressivement en société urbaine. S'opposent donc à cette époque deux genres romanesques : les « romans du terroir », proposant une vision presque idéalisée d'une vie rurale traditionnelle et les « romans de l'industrialisation » qui dépeignent au contraire la noirceur d'un monde industriel et déterminé, touché par les guerres mondiales.

Parmi les premiers, dont grand nombre a gagné sa place dans les classiques québécois, j'aimerais en proposer deux : *Séraphin*,

un homme et son péché (Claude-Henri Grignon, 1933) et *Le Survenant* (Germaine Guèvremont, 1945). En effet écrits entre les années 1930-50, ces romans du terroir, représentants de l'esprit traditionnel canadien-français qui place au centre de la société la famille archétypale et la religion, présentent les codes de cette société ainsi que l'ordre préétabli dans une langue fleurie qui s'éloigne voire s'oppose à la langue de métropole.

Or, cette transgression des personnages est redoublée de celle de réalisateurs (C. Binamé (2002) et E. Kanuel (2005)) qui adaptent ces romans pour le grand écran à l'orée du XXe siècle. Transgressé une première fois à l'intérieur de la diégèse, transposé entre les médium, l'ordre du terroir touche alors un public qui est bien loin de cette vie rurale d'alors.

Je me propose d'étudier les différentes caractéristiques du rural québécois de la première moitié du siècle, illustrée par ces deux classiques pour ensuite montrer que les personnages centraux de ces romans transgressent mais revendiquent finalement une autre lecture du rural. Dans une seconde partie de mon travail, on analysera la récurrence des scènes épiques dans les deux films comme une relecture et une transposition actuelle de certaines scènes essentielles au mode de vie rural qui, par le passage entre les média, accède au rang de mythe.

LE PAYS RURAL RACONTÉ. APPROCHE CROISÉE FRANCE-QUÉBEC À TRAVERS LES ŒUVRES LITTÉRAIRES: « GASPARD DES MONTAGNES À LIVRE OUVERT » ET FRED PELLERIN À SAINT-ELIE DE CAXTON EN MAURICIE.

Authors: *Pierre-Mathieu Le Bel**, Ottawa University, Canada; *Aurore Mirloup*

Keywords: folk tale, geography, literature, ruralspace, tourism

Abstract: La littérature entretient avec les lieux un rapport dialectique: l'œuvre resitue le lieu par le parcours physique et intellectuel de l'écrivain. En retour, elle lui donne du sens. Le tourisme littéraire regroupe des adeptes d'un auteur, d'une ambiance liée aux lieux d'une œuvre, d'un contexte socio-historique particulier, ou encore d'amoureux du patrimoine, etc. Conscients qu'il s'agit plus d'itinérance littéraire diffuse que de réels pèlerinages, de multiples acteurs (agences de voyage, collectivités, associations, éditeurs) se sont emparés de ces patrimoines littéraires, en développant des circuits littéraires autour de lieux réels ou symboliques.

C'est sur deux parcours accompagnés d'audio-guide que cette communication s'arrêtera. Leur point commun: ces deux expériences sont construites autour d'œuvres littéraires issues de la tradition orale. Le conte ajoute une dimension intéressante à l'œuvre littéraire, celle de la transmission orale. Henri Pourrat (1887-1959) en France, comme Fred Pellerin (1976–) au Québec, ont tous deux recueilli des histoires, des légendes racontées parfois depuis plusieurs générations. On peut considérer ces auteurs et leur œuvre comme un maillon entre mémoire orale et lecteur, mais également entre les habitants de l'urbain et le monde rural. Les œuvres deviennent médiatrices entre les lieux.

Notre communication s'arrêtera aux traces que les acteurs du tourisme littéraire ont choisi de valoriser. Comment les ont-ils traduites, et avec quels partenariats localement? Comment les textes font-ils le lieu? Comment les mécanismes génériques du conte construisent-ils le lieu? En retour, à quelles prises textuelles les acteurs territoriaux s'accrochent-ils lorsqu'ils passent par le conte?

UTILISATION DE LA PÉRIPHRASE DANS LA NOMINATION SECONDAIRE DES NOMS DE LIEUX DU QUÉBEC

Author: *Isaeva Ekaterina**, Russian State University for Humanities, Russia

Keywords: imaginaires ruraux, place names

Abstract: Les noms de lieux sont les procédés de la langue qui définissent par excellence les objets géographiques, en représentant la terre d'un pays. La verbalisation toponymique de la campagne québécoise a une histoire longue de 400 ans où la géographie du continent nord-américain découvert par des Français a été fixée sur les cartes. Cette première nomination toponymique du Québec voisine aujourd'hui avec la nomination périphrastique qui véhicule l'information supplémentaire concernant l'image du terroir et/ou les valeurs de ses habitants. La densité de la nomination secondaire des toponymes du rural du Québec a déterminé notre analyse linguistique et culturelle de ce phénomène présent à la charnière des 20 et 21 siècles qui permet de revisiter les topolexemes: hydronymes, dromonymes, oronymes etc. Le corpus comprend les données recueillis par Henri Dorion et Pierre Lahoud [1] ainsi que par nos soins auprès des stagiaires québécois de l'Université des Sciences Humaines de Russie. A titre d'exemple mentionnons les quelques topolexemes périphrastiques (en parenthèse est donné le nom de lieux officiel): l'Oeil du Québec (Babel, mont); le Paradis des artistes (Baie-Saint-Paul); la Perle du lac Saint-Jean (Roberval, région de); le Royaume de la pêche blanche (La Baie, région de).

[1] Henri Dorion, Pierre Lahoud. *Le Québec autrement dit et un tour du monde en surnoms*. Montréal, Québec, Les Editions de l'Homme, 2013. 272p. ISBN 978-2-7619-3251-6

SLOT2 LE RURAL DANS LE POLICIER, LE CINÉMA, LA TÉLÉVISION / RURAL AREAS IN THE DETECTIVE NOVELS, FILMS, TELEVISION

Chair: *Annie Jouan-Westlund*

Schedule: Tuesday, 1 September, 17:15–19:00

THE STAGING OF THE MONTALBANO LANDSCAPE

Author: *Alessandra Bonazzi**, Università di Bologna, Italy

Keywords: landscapes, Southern Italy, télévision

Abstract: In 1999 Andrea Camilleri intervened in "The construction of the Sicilian landscape: geographers and writers face to face". He, of course, was on the side of the writers and declared that, being "one who tells invented stories" he can only take the

path of invention. Indeed, like Reuben Monterosso, he defines himself as a novelist and therefore a man of great faith. The strategy for avoiding the so-called “disenchantment with the world” is to construct for one’s characters a land made up of different parts, shaping and structuring a land based on reality. In the same year we saw the televised version of the detective novel series featuring Inspector Montalbano. The first act set the scene of Montalbano’s geographical dislocation. The second dealt with the character’s form. In short, the projection of the written word onto the TV screen required, like any translation, the betrayal of at least one dimension in order to guarantee likeness and verisimilitude. But what happened from 1999 to 2013 was the progressive voiding and “cleansing” of the “half-made-up places” that form the settings of the Montalbano stories. The very human clutter of the “invented land” was transformed into a silent empty landscape. The disenchantment that the TV series brought on was that of denying the “variable geometry of the basic toponomastic structure” its function of “keeping the characters and plot in check”, whose effect was to break the link between form and meaning which on the written page regulates Camilleri’s geographical landscape.

THE OUTER HEBRIDES IN CRIME NOVELS OF PETER MAY

Author: *Franck Chignier-Riboulon**, CERAMAC-Université Blaise Pascal, France

Keywords: built heritage, landscapes, local identity, ruralspace, sustainable development, tourism

Abstract: Peter May is a Scottish writer, now living in France. He is known for his detective stories, whose a trilogy located in the Outer Hebrides, in Scotland. The main character for this serie is Fin MacLeod, a former police inspector. The first book, *The black house*, has been published in 2009, the second, *The Lewis man*, in 2011, and the last one, *The chessmen*, in 2012.

Thanks to the stories, the writer presents the landscapes and people of these islands. Novels show current time life and legacies, especially in religious, cultural and agricultural fields. These islands were very isolated from Scotland, and the Minch strait was very dangerous (storms, ocean currents). Then, local society has better preserved the Celtic culture, and until now a majority of the people continue to speak Gaelic language. In the same way, the crime novels describe the changes in agriculture and breeding, in relation to harsh conditions, whose “blackhouses” ruins are the contemporary witnesses. Outer Hebrides are the North-western part of Europe, exposed to the constant assaults of ocean and changing weathers against the oldest gneiss of the continent. Then, the writer always speaks about the marchair, a poor soil for sheeps. More largely, landscapes are rolling moors of blanket peat, lochs and rivers. Therefore, today, islands are become a paradise for fishers.

Hence, I would like to propose a text on Peter May’s Hebrides to bring out current situation (with tourism), transformations of daily life and past difficulties, with their consequences (emigration, drink question...).

LA PLACE DE LA RURALITÉ ISLANDAISE DANS LES ROMANS POLICIERS D'ARNALDUR INDRIDASON ET ARNI THORARINSSON

Author: *Mauricette Fournier**, Université Blaise Pascal, France

Keywords: imaginaires ruraux, roman rural

Abstract: En Islande le taux d'agression est nettement plus faible que dans le reste du monde. Le taux d'homicide (2,2/100000 habitants) est même le plus bas des pays de l'OCDE : aucun homicide n'a par exemple été recensé pour les années 2003, 2006 et 2008. L'Islande se situait également avant la crise de 2008 (et la faillite de ses trois plus grandes banques) au premier rang des pays les plus développés selon l'indice de développement humain (IDH) et malgré la récession de ces dernières années l'indice de satisfaction de ses habitants à l'égard de l'existence la place encore à la troisième place (après la Suisse et la Norvège). Dans l'environnement pourtant socialement « irénique » de cette île peuplée de seulement 319 575 habitants (en 2012), deux auteurs de romans policiers, Arnaldur Indridason et Arni Thorarinnsson, parviennent à multiplier les enquêtes criminelles. Tous deux également lancent leurs héros dans d'incessants va-et-vient entre ville (Reykjavík) et campagnes plus ou moins reculées. Nous nous proposons à partir de plusieurs exemples d'étudier les représentations de la ruralité dans ces romans policiers et les valeurs que lui attachent Indridason et Thorarinnsson.

AESTHETICS, REPRESENTATION AND COMMUNICATION OF RURAL IN RUSSIAN MAFIA CINEMA. (1988-2010)

Author: *Oksana Bykva Dognon**, UNIVERSITY OF BURGUNDY, FRANCE

Keywords: imaginaires ruraux, Moscow, Post-Soviet countries, Russian cities, télévision

Abstract: The phenomenon of the Russian mafia despite that it is fairly new in the world of classical mafia, had already won his high positions in international society. Here it is necessary to distinguish the opposition of rural face to the big city in Russian Mafia cinema. In the case where the criminal hero find himself in the countryside in exile or fled there voluntarily, the campaign represent an area of tranquility and peace, often misleading because thereafter the criminal is found and avenged. The influence of rural is benefactor on Russian Criminal protagonist. Rural often turns a hard personality of the criminal in a human being. The example of the films “Boumer” and “Boumer 2” is crucial in the representation of rural and its influence on the evaluation of the 4 criminal friends. The special feature of this film that it is called on behalf of the BMW car, which is the main hero. The final scene shows abandoned Boumer which found his death in the forest without his owners... The originality of the russian mafia cinema genre, in particular, that it was in some cases produced, and performed by former criminals. Such was the case of Vitaly Demochka, former criminal, who transferred his real life into the movie. This story, the real and fictional one happens in the suburb area of the city of Ussurisk, where Vitaly and his criminal group always live and did their criminals actions.

QUELQUES REPRÉSENTATIONS DU MONDE RURAL CATALAN SUR LA TÉLÉVISION

Author: *Rosa Català Marticella**, Universitat de Barcelona, Spain

Keywords: Catalogne, imaginaires ruraux, nouveaux paysans cultivés, télévision

Abstract: Après les années du dépeuplement rural et du mépris des paysans qui arrivaient dans les villes; nous nous proposons de fournir quelques indices sur l'émergence de nouveaux imaginaires ruraux européens. Dans ce contexte, ces dernières années, la télévision catalane a produit quelques émissions sous des nouveaux formats de série documentaire-ludique à propos du monde rural, dont *El paisatge favorit de Catalunya* (2009, 8 chapitres, 24 paysages proposées) et *Terreny personal* (2012, 12 chapitres) sont les plus imaginatives et novatrices. Nous avons pris quelques chapitres de *Terreny personal* pour préparer cette communication.

Dans ces émissions on reconnaît une nouvelle approche du monde rural fait de changements et de permanences. Au-delà des réalités, des gens et des paysages présentés on s'aperçoit d'un certain biais, car on pressent la représentation d'un monde assez ou trop idyllique. L'émission *Terreny personal* nous présente des paysans cultivés et intelligents, qui prennent des décisions réfléchies et bien choisies, qui sont bien renseignées des progrès et qui utilisent les nouvelles technologies de la communication; qui voyagent et qui sont héritiers des savoir-faire. On y trouve, parallèlement, d'autres interlocuteurs: artistes, chanteurs et groupes musicaux; des retraités ou des néo ruraux qui cherchent l'écologie, le repos et un nouveau rapport avec la nature et avec le territoire. En outre, des jeunes adolescents présentent une photo de leur lieu préféré qui renforce une valorisation des paysages et patrimoines.

T03 GEOGRAPHY IN ACTION – SPATIAL PLANNING AS A WAY OF DISCOURSE ON BORDERS

Organizers: *Mátyás Jaschitz*, *Gyula Ocskay*

Location: Room D

SLOT1

Chair: *Gyula Ocskay* Discussants: *Jerzy Banski*, *James W Scott*

Schedule: Wednesday, 2 September, 15:00–16:45

BORDERS AND CONSTRUCTIVIST REGIONAL GEOGRAPHIES: CROSS-BORDER COOPERATION ADDRESSING CHALLENGES TO ALTERNATIVE COHESION POLICIES

Author: *James W Scott**, University of Eastern Finland, Finland

Keywords: borders, cohesion, cross-border cooperation

Abstract: Many socio-spatial phenomena can only be described, explained, or traced; they cannot be meaningfully measured, counted or “correlated” in a positivistic manner. Studies with a “soft” (constructivist) approach on perceptions and representations also have the benefit that they critically challenge the researcher’s own preconceptions. This is clearly most relevant in relating the significance of cross-border cooperation and other flexible territorial arrangements to European Cohesion Policy. In this presentation I suggest that CBC is more than just filling the gaps between national development strategies; it is a cultural context for Cohesion beyond traditional nation-centric modes. Furthermore, cross-border integration need not be all-encompassing but centred on specific networks that create trust and sustainable working relationships. If the role of CBC as an element of European Territorial Cohesion is to be taken seriously, the policy aim should be less focused on criteriology (fulfilling “objective” quantifiable targets) and more on the capacities of cross-border cooperation to develop according to its own dynamics. This includes more support to civil society actors and their networks; these groups, together with other local-level actors can in effect create regional geographies above and beyond traditional state-centred and administrative territoriality.

SPATIAL PLANNING AS A WAY OF DISCOURSE ON BORDERS – TERRITORIAL OBSERVATION

Author: *Mátyás Jaschitz**, CESCO, Hungary

Keywords: cross-border datasets, cross-border planning, territorial observation

Abstract: How can the discourse of borders be modified by the way of planning? Is this possible? What is so special in cross-border planning? What are the main barriers in front of a borderless planning?

As the first aspect of the thematic panel this study will try to answer these questions through the complex problem of cross-border territorial observation. It will briefly introduce the relevance and the speciality of cross-border planning, and it will reveal the main obstacles of a successful cross-border spatial planning from the data needs point of view.

By a collection of best practices the study will also offer some possible solutions.

THE INFLUENCE OF THE BORDER ON THE LOCAL DEVELOPMENT ON THE EXAMPLE OF LUBLIN BORDER REGION (POLAND)

Author: *Jerzy Banski**, Institute of Geography and Spatial Organization, Polish Academy of Sciences, Poland

Keywords: border, development

Abstract: The main objective of the investigation is to diagnose of the development factors, resulting from the existence of boundaries of various degrees of permeability. The eastern border of the Lublin province is a fragment of the national border with Belarus and Ukraine, countries, which chose different models of political and economic development. Ukraine adopted a more pro-European model and it could be expected that this might have had a more advantageous influence on the economic condition of the border zone. Yet, the field studies showed unambiguously that the area along the border with Belarus' develops better. There are many reasons for this fact, but the most important ones include: more peripheral location of the Polish-Ukrainian borderland and the psychological conditioning of the local communities, having its roots in historical past.

Generally, the borderlands accumulate a number of negative qualities (low level of social activity, unsatisfactory level of equipment with technical infrastructure, low number of border crossings, low intensity of transboundary collaboration, low economic activity of the local self-governments and inhabitants), while there are only few of those that might constitute a potential for the economic advance (higher chances of acquiring investment means from assistance funds, neighborhoods of two countries as potential sales markets of service and produce, vast pool of cheap labour, primarily from across the border and location in the zone of various cultures and religions). However, the current geopolitical situation becomes a major and negative factor shaping the future of this area.

SPATIAL INFORMATION ACROSS BORDERS – PRACTICAL EXPERIENCES IN THE EUREGIO MEUSE-RHINE

Author: *Ralf P. Meyer**, AGIT mbH, Aachen, Germany

Keywords: capitals, EU Cohesion Policy, Germany, GIS mapping, metropolitan areas, multifunctionality, observatory, smart territories, spatial planning, technology, territorial cohesion, territorial consciousness, territorial impacts

Abstract: The Euregio Meuse-Rhine (EMR), located at the intersection of Belgium – Germany – The Netherlands, is an urban area with medium-sized cities and appr. 4.0 mln. inhabitants. Although it is one of the oldest cross-border regions in Europe, actual, comparable cross-border data and spatial information is still lacking. AGIT, the economic development agency of Aachen region (Germany), was involved in two projects focussing on the improvement of the cross-border knowledge and data base:

- The “Euregional Information Service (E.I.S.)” providing EMR on the one hand basic structural data concerning cross-border regional development and on the other hand important innovation indicators regarding its international competitiveness in a uniform, transparent and permanent way. The information, mainly based on European and national statistics, but also additional regional sources, was frequently updated and mainly offered via an interactive E.I.S.-website, but also as a cross-border statistical yearbook. “Interactive” means, that the user could not only select between several spatial and temporal dimensions, but also choose the way, how the information should be provided (as Excel file or various graphs or map).
- “The Locator”, the first regional cross-border location information system for enterprises in Europe (www.the-locator.eu), provides information on industrial sites, commercial real estates, established companies, but also basic information for businesses, who want to settle in one of the sub-regions of EMR. The information on this portal is not only geo data-based and cross-border harmonized, but also via interconnections (SOAP-interfaces) to various reliable sources in the different sub-regions permanently updated (“data-at-the-source” concept).

RELATION OF REALITY AND PLANNING IN BORDERLANDS – A CASE STUDY ON CROSS-BORDER HEALTH CARE

Authors: *Éva Gangl**, CESCO, Hungary; *Enikő Nyerges*, Central European Service for Cross-border Initiatives, Hungary

Keywords: borderlands studies, cross-border health care, cross-border planning

Abstract: Cross-border public services are crucial in terms of cooperation for border regions. Such institutional solutions are able to give meaning to cross-border cooperation, even for those living in the border region, by producing tangible results. Hereby not only the increase of territorial effectiveness becomes reachable, but cooperation itself makes sense and becomes legitimate at the same time.

Out of public services health care means the most important, but also the most complicatedly manageable field if our goal is its cross-border organization. However, by 2014, all relevant regulation barriers were theoretically abolished in the EU, and even the first best practices are available. We can state that cross-border health care in practice leaves a lot to be desired, so while we face to significant untapped potential, more and more barriers are turning up.

We carry out our analysis in the Western part of the Slovak-Hungarian border region, in the hinterland of Győr, where everything is given to the implementation of successful cross-border cooperation, but the use of these opportunities is going slowly.

By using quantitative and qualitative spatial analysis methods, we aim at revealing the possible cooperation potentials including mainly the conditions of the concrete cross-border health care service organization. We focus on the analysis of those practical barriers hindering the use of these potentials, and the expected spatial organising changes by ceasing them as well.

T06 SUSTAINABILITY AND CONSUMPTION

Organizer: *Peter Simonyi*

Location: Room M

SLOT1

Chair: *Peter Simonyi*

Schedule: Tuesday, 1 September, 08:30–10:15

SUSTAINABILITY AND URBAN GOVERNANCE - IS SUSTAINABILITY A CONSCIOUS PURPOSE OF THE URBAN DEVELOPMENT PRACTICE? A CASE OF CLUJ-NAPOCA.

Author: *Julia Nagy**, Babes-Bolyai University, Faculty of Geography, Romania

Keywords: local governance, sustainable development, urban planning

Abstract: In recent years the concept of sustainability gained a tremendous importance in the process of urban development and became one of the fundamental pillars of the urban governance context. Rapid urbanization increased the role of cities as they became a major factor in the course of production, consumption as well their “attitude” towards the natural resources. Therefore, urban settlements became constantly viewed through the lenses of sustainability. Urban governance approaches play a key role in the process of sustainable development and must develop new behaviours in order to contribute to the global sustainability agenda. Consequently, the focus of this paper is to have a brief review about the integration of sustainability in the policy making process of the local governance in the case of Cluj-Napoca. It will assess the key factors and instruments that are used to measure and capture the urban performances within the various dimensions of sustainable development. Furthermore, in order to understand the principles and objectives regarding sustainability in the policy making process of the local governance several urban policies are going to be analysed in the reflection of economical, social and environmental dimensions. Finally, by investigating the ability of the local government to recognize the urban challenges, the capability to incorporate solutions and create conditions to develop the sustainable urban texture it can be concluded that the dynamics of the territorial development must be accompanied by the necessary methodological tools and new decision making systems in order to achieve a sustainable progress.

HOW ENERGY USE CAPS CAN OPEN THE DOOR OF SUSTAINABILITY

Author: *Veronika Kiss**, Budapest Corvinus University, Hungary

Keywords: consumption, environmental change, global climate change, inequalities, society renewal, sustainability

Abstract: Debates challenging sustainability are more often calling for holistic approaches and for sustainable consumption. Tools for resource use capping do not only address environmental problems but, due to their holistic approach, they contribute significantly to social development through aiming for the equal and just distribution of advantages arising from natural resources use. The present paper aims to put into the spotlight the need for setting energy use caps, while ensuring dignity and fair benefit sharing for all by examining social aspects of energy resource capping proposals (Gyulai, 2010; Fleming et al, 2011).

The examined tools may benefit the poor the most (Dresner, 2004; Centre for Sustainable Energy, 2008) either rewarding marginalized people who use less energy or opening up opportunities for them through providing interest free loans and professional advice to transform their energy consumptions. Among the social benefits they may bring to society are job creation (Tombácz, 2009), enhancement of human labour, reduced household costs (Gyulai, 2010, Center for Sustainable Energy, 2009) as well as wider access to environmental friendly products and services. Furthermore, they create common purpose – aligning individual and collective aims to meet the requirement of the set energy caps, while using the fairly distributed energy units in the most efficient way.

Based on reviewing theoretical proposals for energy caps and the studies on their social impacts, the present paper will consider their environmental and socio-economic aspects and by doing so aims to provide input to debates on sustainable development.

THE PROBLEM OF SOLID WASTE DISPOSAL IN THE CAPITALS OF THE POST-SOVIET COUNTRIES

Author: *Natalia A. Koldobskaya**, Moscow State University, Russia

Keywords: capitals, ecology, Post-Soviet countries, transformation

Abstract: Despite the fact that in the USSR the only way to waste utilization was at landfills, the distinguishing feature, especially in large cities was the state system of secondary resources. In 1989, for recycling of solid waste in the Soviet Union accounted for 25%.

In 1991, the system has been eliminated, reduced role of the state in this sector with the appearance of a number of private firms involved in the export and processing of waste.

Currently, in the territory of the former Soviet Union the situation in the field of solid waste is very unequal. In 50% of the capitals of Post-Soviet countries, the main method of waste disposal is dumping in landfills, the capacity of which in most cases has long been exhausted. The greatest progress in the field of waste utilization among these cities reached the capital of the Baltic countries. A key element of this success is relatively organized separate collection of waste. The percentage of recycling in Vilnius, Riga and Tallinn is about 10%, which is the biggest indicator of the former Soviet Union. In Tallinn waste incineration unit Iru will dispose for the purpose of energy production 220,000 tons of mixed household waste per year, and due to modern technology 85% of the energy contained in the waste is converted into electricity and heat. Projects of transformation of waste to energy exist in other cities, for example, in Astana. But while in the former Soviet space the main method of disposal is extremely environmentally unfriendly dumping of unsorted waste at landfills.

PAPERRAND

Authors: *Virag Mathe**, Budapest University of Technology and Economics, Hungary; *Dóra Péter*, Budapest University of Technology and Economics, Hungary

Keywords: innovation, technology

Abstract: The question of sustainable building construction has become one of the most important issues in the last decades. The aspect of finding an optimal building material is one of the main keypoints in sustainable architecture: A material which is not only economical but also environmentally conscious in terms of production and usage. Within this research the usability of paper as a construction material and solution of this question is analyzed. The concept of building a paperhouse might seem odd at first. Most of the people think of paper primarily as a possibility of storing data but not as an available building material. Therefore, before exploring the technical approach the prejudices in society have to be dispelled. The bad reputation of paper is mostly related to aesthetics as people connect the concept of recycled paper to waste recycling processes or a shelter of homeless. Besides the social acceptance complications there are also critical points from the technical point of view. The most critical questions are connected to the strength, fire- and water-resistance of paper. The outline of this research paper proves that paper is capable of providing these properties. Still, according to holistic principles paper can not be applied as a general solution for building different structures. In each case it has to be considered, whether paper can be used as a construction material. Nevertheless, given the advantages of paper in architecture, paper should always be considered as an alternative in the choice of the optimal construction material.

SLOT2

Chair: *Peter Simonyi*

Schedule: Tuesday, 1 September, 10:45–12:30

THE CHALLENGE OF FOOD SECURITY IN THE MEDITERRANEAN BASIN

Author: *Alessandro Leto**, University of Roma Tor Vergata, Italy

Keywords: Europe, food security, mediterranean area, sustainability responsibility

Abstract: In this last years, we have been force to realize that within the Mediterranean Basin, mainly on its southern and eastern shores, the problem of food security appeared again. This delicate issue is strictly related to some main factors, both of geopolitical and macro economic origins, but also to certain specific climatic conditions such as desertification, that are literally changing the nature of those territories. Facing this trend, many of the local governments of the area did not reacted yet with proper policies able to tackle the side effects of the Food Crise that hits several people. More, despite the local and regional scale of this same crisis, many researchers and scholars are still arguing on the negative influence generated by the incidence, at the global scale, of speculative finance in the determination of aliments and food's market prices. Food Security represents today an authentic emergency, able to create a shock even in the European Union. The aim of the present paper is to investigate how macro policies, mainly from the EU, such as the European Neighbourhood Policy, can be helpful in facing this delicate problem.

THE ROLE OF CORPORATE WATER USERS IN THE WATER, FOOD AND ENERGY NEXUS

Author: *Csaba Vaszko**, World Wide Fund, Hungary

Keywords: sustainability, water stewardship, water, food and energy nexus, ecosystem services

Abstract: Water is well recognized as one of the key sustainability challenges of the 21st century. Nearly one-fifth of the world's population already lives in regions where water is physically scarce and almost half the world's population will be living under severe water scarcity by 2030, if no new policies are introduced. Insufficient and contaminated water supply has become one of the greatest sustainability and development challenges. The strong linkages between water-related challenges and climate change, food and energy security pose tangible financial risks and opportunities for private companies that rely on fresh water to produce their goods and services.

From a production standpoint, water is material to the bottom line of most companies. Fresh water ecosystem services represent unrealized assets for many companies. Business engagement beyond the fence line should not simply be a matter of corporate social responsibility (CSR) or public relations. There is an essential business case for achieving sustainable flows and access to clean water.

Corporate water stewardship – which means that companies seeking to improve the efficiency and cleanliness of their internal operations and in their supply chain, while also facilitating the sustainable management of shared freshwater resources through collaboration with other businesses, governments, NGOs, communities, and others – is one part of solving these challenges. Companies' ability to consider and address the inherent linkages between and impacts of water on food and energy will also be a key factor in the effectiveness of their stewardship practice.

SUSTAINABLE FOOD CONSUMPTION FROM A GEOGRAPHICAL POINT OF VIEW

Author: *Peter Simonyi**, Department of Social and Economic Geography Eötvös Loránd University, Hungary

Keywords: criteria of sd, essential needs, food consumption, local food, sustainability

Abstract: Nutrition is one of the three basic essential needs of man. It is more or less well known how long shortage of them can be survived. Only lack of food may have effect to security, see hunger riots, so it has special importance. Starvation is a global problem yet, however growing food demand is trivial. Number of mankind will grow up 30 % by 2050 but food consumption at

least 50 percents caused by rising income also. Food production has to face a new challenge: sustainability. The future agricultural production should fit to sustainable development but the total food process should really fit to. Other side of nutrition is composition of food. It has significant effect from aspect of sustainability. The question is what could be criteria of sustainable development for food consumption? The third side is to suit for healthy diet. Does the sustainable food consumption fit to? Nutrition of early times can help to answer the question. In practice it is not easy to evaluate territorial consumption of nourishment by regions or countries but results are remarkable. Precise data would be only base for research and policy making. Changes in food consumption for sustainability will redraw the geographical picture in the world. It is determining that real way to feed mankind according to sustainable development can be find by holistic and system approach only.

T07 TEACHING FOR HUMAN GEOCAPABILITIES

Organizer: *Michael Solem*, Association of American Geographers, United States

Location: Room C

Schedule: Monday, 31 August, 17:15–19:00

Session description: This workshop will introduce participants to an online teacher professional development course created for the GeoCapabilities project, funded by the U. S. National Science Foundation and EU Comenius Programme.

GeoCapabilities is an international collaboration to develop materials that illustrate for teachers how the acquisition and engagement with geographical knowledge and perspectives contribute to the growth of human capabilities. The project emphasizes the value of geographical knowledge for life, work, autonomy, citizenship and environmental responsibility in a highly complex and interdependent world – and the essential role of schools in providing access to that knowledge. The goal is to create more effective participation and contribution towards a better world by using a “capabilities” approach to geography education that develops geography subject knowledge, curriculum planning and curriculum making.

Participants will learn strategies for using the GeoCapabilities course to enhance teacher preparation programs and support international collaborative projects involving pre-service and in-service teachers. Four course modules will be demonstrated: 1) Defining and developing disciplinary capabilities, 2) Curriculum making by teachers, 3) Connecting capabilities with curriculum making, 4) Communicating capabilities in the classroom. Each module is enriched with multimedia and web technologies to support collaborations and dialogue among teachers and teacher educators in different countries.

T08 TOWARDS A NEW INTERNATIONAL STRATEGY FOR GEOGRAPHY EDUCATION (ISGE)

Organizers: *Henk Ottens*, Royal Dutch Geographical Society, The Netherlands; *Massimiliano Tabusi*, EUGEO, Università per Stranieri di Siena, Italy

Location: Room M

Schedule: Tuesday, 1 September, 15:00–16:45

Session description: The usefulness of geography education is widely acknowledged, but it is not always undisputed. Therefore, geographers and their organizations have the responsibility to keep geography education up-to-date and to maximize its contribution to people and society. This requires a regular reassessment and renewal of the profile, content, methods and organization of geography in schools to address the dynamics in the world and in teaching. In doing so, it is important to seriously take into consideration the way the outside world of non-geographers perceives the profile of geography and its contribution to society. The International Year of Global Understanding in 2016 offers the opportunity to (re)design teaching content and methods. Starting from everyday activities but also making visible the consequences global consequences and strategies for global understanding and sustainability.

T09 MAPTIONNAIRE – CREATE MAPS FOR INSIGHT AND ENGAGEMENT

Organizers: *Sakari Ellonen*, *Timo Hämäläinen*, Maptionnaire, Finland

Location: Room M

Schedule: Monday, 31 August, 13:00–13:45

Session description: Maptionnaire is an online service that brings together interactive maps and questionnaires. Its roots are in academic research from the fields of land-use planning and urban studies. It gets typically used in research projects focusing on place-specific human experiences to gather people-produced qualitative spatial data. Also, cities and municipalities have found the tool useful in their urban planning processes for civic engagement. Typical fields of application include urban planning, traffic and transportation planning, real estate, and development of parks and green areas. The most simple projects resemble post-it stickers on a map: just comments with co-ordinates. However, Maptionnaire comes with powerful quantitative and visual features to deal with complex data collection and analysis -- everything that is expected of modern survey research tools. As a result, the response data may be analyzed thoroughly using our browser based tools without separate GIS software or expertise. Exportation and importation of GIS data in standard formats and protocols is also fully supported. Discover Maptionnaire at www.maptionnaire.com

ABSTRACTS – POSTER SESSION

P63 POSTER SESSION

Organizers: *Róbert Györi, Zoltán Szalai*

Location: Main Hall

Schedule: Monday, 31 August, 14:45 – Opening ceremony of poster session

TEMPERATURE CHANGES IN TRANSYLVANIA (ROMANIA) IN PERIOD 1966-2010

Author: *Ottília Rusz**, National Meteorological Administration, Regional Meteorological Centre of South Transylvania, Târgu Mureş Meteorological Station, Romania

Keywords: change points, Transylvania, trend

Abstract: Yearly and monthly mean temperatures (from the period 1966-2010) were used from the followed meteorological stations located in Transylvania (altitudes are shown in parentheses): Braşov (534 m), Cluj (413 m), Dumbrăveni (318 m), Joseni (750 m), Lăcăuţi (1776 m), Miercurea Ciuc (661), Odorheiu Secuiesc (523 m), Târgu Mureş (308 m), Târgu Secuiesc (568 m), Topliţa (687 m). Positive and statistical significant trends (Mann-Kendall test) are indicated for mean annual temperatures (except Miercurea Ciuc) and for mean temperatures of the summer months. Mean annual temperatures greater than the third quartiles in most cases belong to the years after 2000, while mean annual temperatures smaller than first quartiles generally belong to the years before 1990. Overlapped, unequal periods, with increasing length (31, 32, ... 45 years) have no significant trend until 2000. Overlapped 30 year trends provides positive and significant values in annual mean temperature for the last periods (beginning with period 1972-2001). CUSUM charts indicate occurs of significant change points at different years in cases of mean annual temperatures and mean temperatures of the summer months. In all these cases, these changes show increasing trends in the second parts of studying period. Two parts regressions of mean annual temperature usually indicate 1986 as the first year of an increasing trend. Range-mean graphs were used in order to decide whether the studied time series have constant variance or no. Except Lăcăuţi, in all cases the variance of mean temperature in November is decreasing in the mean.

MYSTERIOUS CAVITIES OF BURDA HILLS (SOUTH SLOVAKIA)

Authors: *József Szeberényi**, Geographical Institute, RCAES HAS, Hungary; *Valentin Cseh; Gyula Juhász; Klaudia Kiss; Blanka Lehotská; Roman Lehotský; Bernadett Szabó; György Varga*, Research Centre for Astronomy and Earth Sciences (HAS), Hungary; *István Viczián*, Geographical Institute, Research Centre for Astronomy and Earth Sciences of the HAS, Hungary

Keywords: Burda Hills, caves, Danube, Medveszállás, petroleum refinery

Abstract: There are legends among the local population about origin of several mysterious cavities, which can be found in the south side of Burda Hills north-eastward from Kováčov (Kovácspatak). It is a fact, that these cavities were drilled and it was the first step of a gigantic industrial investment to save a planning petroleum refinery in time of the Second World War...

The great petroleum refinery next to Szőny was destroyed by bombing of allies on August 21st and 28th 1944. It was impossible to refit the factory during the war. The damage was around 35 million Pengő according to the assessment. The government decided to relocate the unviolated equipments to Kováčov and build a new refinery inside of Burda Hills. This action called „Medveszállás”. This place was a good choice in terms of transport, because of railway line Budapest-Bratlava and waterway of Danube and the capability of physical geography of Burda Hills is also good to affiliation of planning refinery.

Since 1996 also zoologist are interested in this locality – important hibernaculum for bats (Chiroptera) and investigated, mapped and documented this area of planned refinery. Nowadays 12 bat-species hibernate inside the underground cavities.

We would like to present several interesting parameters of planning adaptation of natural environment of petroleum refinery based on result of geomorphological investigation of Burda Hills, maps of cavities and authentic documents of planned petroleum refinery.

GRAVELS OF VISEGRAD GORGE

Authors: *József Szeberényi**, Geographical Institute, RCAES HAS, Hungary; *János Balogh*, Geographical Institute HAS, Hungary; *Éva Kis*, Geographical Institute HAS, Hungary; *Sándor Józsa; Klaudia Kiss; István Simon; György Varga*, Research Centre for Astronomy and Earth Sciences (Hungarian Academy of Sciences), Hungary; *István Viczián*, Geographical Institute, Research Centre for Astronomy and Earth Sciences of the Hungarian Academy of Sciences, Hungary

Keywords: Danube, geomorpgy, gravels, Miocene, petrography, pleistocene, Visegrad Gorge

Abstract: The gravelly sediments are important parts of investigation of Visegrad Gorge. All the lower and higher geomorphologic levels were covered by fluvial (Danube) sediments according to the standard theory of terrace chronology, but it is questionally according some other earlier results. We investigated several typical gravelly units in Visegrad Gorge and other important place along the Danube and its tributaries. Our newest preliminary investigation revealed some interesting information about gravels of Danube Bend, which disagree the standard theory of terrace chronology.

Gravelly sediments of Visegrad Gorge can be compartmentalized into groups based on preliminary petrographic and geomorphologic results. These groups can be characterized by important different rock types and/or attributes of structure and texture of same rock types according to preliminary petrographic analysis. Components of several gravel units resemble Miocene, other units resemble Pleistocene Danubian sediments. Geomorphologic situations of gravels are also special. The higher and lower geomorphologic levels of Visegrad Gorge were covered by typical and good determinable components of gravels.

We would like to present important parameters of gravels of Visegrad Gorge based on petrography and basic geomorphologic situations.

SEDIMENTS AND ARCHEOLOGICAL FINDINGS OF ABANDONED BRICKYARD AT MALÁ NAD HRONOM, SLOVAKIA

Authors: *József Szeberényi**, Geographical Institute, RCAES HAS, Hungary; *Balázs Bradák; Sándor Józsa; Klaudia Kiss; András Markó; Alzbeta Medved'ova; Máté Megyeri; Mihály Molnár; Pavel Rostinsky; György Szakmány; Jacek Szmanda; György Varga*, Research Centre for Astronomy and Earth Sciences (HAS), Hungary

Keywords: Bronze Age, fluvial terrace, gravels, high coast, Hron, loess, pleistocene

Abstract: Fluvial and eolian sediments were investigated in environment of mouth section of Hron River. The caprock of abandoned brickyard at Malá nad Hronom included some ceramics, bones, shells and pebbles. These are remains of a Bronze Age settlement based on radiocarbon dating of bone and shells and pattern of ceramics. These are the oldest archaeological findings on lower section of Hron Valley.

The loess-paleosol units of abandoned brickyard were analysed and in situ gravelly sediments were determined in the background area of earlier settlement. The material of ceramics was compared with the in situ loess and fluvial clay of Hron River. We would like to present our result relation to sediments and archaeological findings of abandoned brickyard.

Acknowledgement: This project was supported by International Visegrad Fund (No. 11410020) and Agentúra na podporu výskumu avývoja (No. APVV-0625-11)

HEAT WAVE RISK MAPPING IN NOVI SAD (SERBIA)

Author: *Vladimir Markovic**, Faculty of Science, Serbia

Keywords: climate change, map, place names, urbanization

Abstract: Frequency and intensity of heat wave as climate phenomenon has significantly increased in last decades and its consequences on the population, economy and environment are significant. In July 2014 heat wave event have been recorded in Novi Sad. During this event, the maximum temperatures reached or exceeded 30°C for four days (from 5th to 8th July). In this study, the element at risk was the living locations of the local population of the city of Novi Sad. The risk metric used was the overlapping Local Climate Zone (LCZ) types and Urban Heat Islands (UHI) data. According to the results seven LCZ types are detected in built-up area of Novi Sad as well as five different UHI pattern. According to different UHI pattern, the risk map indicates that the same LCZs can have different risk level. On the other hand, according to LCZs types, the risk map indicates that same UHI pattern also can have different risk value. As the final result, the risk map shows five heat waves risk level zones (RLZ) which can be used by the local authorities in order to develop climate-conscious urban planning strategies.

URBAN CLIMATE MONITORING NETWORK IN NOVI SAD (SERBIA)

Author: *Stevan Savic**, Climatology and Hydrology Research Centre, Faculty of Science, University of Novi Sad, Serbia

Keywords: intra-urban comparisons, local climate zone, monitoring network, Serbia

Abstract: The infrastructure development and operation of installed urban climate monitoring network system in Novi Sad (Serbia) for intra-urban comparisons is discussed in this study.

Novi Sad is a mid-sized city with a population of 320 thousands and an investigated built-up area of 55 km². An automated Geographic Information System method was used for defining and delineating the Local Climate Zone (LCZ) types. According to the results 7 LCZ types are detected in the built-up area of Novi Sad and 2 LCZ land cover types in the nonurban environment. Monitoring network in Novi Sad contains 27 stations, and locations of the stations are based on the detected LCZ types, supplemented by the authors' local knowledge and field surveys. The measurements from stations are wirelessly uploaded every 10 minutes to a database for immediate and later processing and analysis.

The time series of air temperature and Physiologically Equivalent Temperature (PET) values showed clearly distinguished patterns among different built-up environments. These intra-urban differences are generally about 1-2°C. The highest temperature surplus is around 6-7°C between compact and open mid-rise (LCZ 2 and LCZ 5) and nonurban areas. Furthermore, during the nighttime the differences are larger in the most cases.

The thermal load variation has the typical daily and nocturnal behavior at sites with different built-up environments with distinct values depending on LCZ types. Therefore, it can be stated that the monitoring system installed in Novi Sad answer the purpose, as it is able to provide beneficial information for detailed urban climate research.

THE ROLE OF COMMUNICATION TOOLS AMONG JAPANESE MOTHERS LIVING IN GERMANY AND FRANCE

Authors: *Mikoto Fujita Kukimoto**, Oita University, Japan; *Yoshiki Wakabayashi*, Tokyo Metropolitan University, Japan; *Yoshimichi Yui*, Hiroshima University, Japan

Keywords: France, Germany, migration, quality of life, technology

Abstract: This study explores the significance of communication tools for Japanese mothers living abroad with a specific focus on the role of the Internet. It has been pointed out that mothers are facing the loss of geographic networks, and are becoming increasingly isolated despite the need for social contact. For geographically heterogeneous mothers particularly, the use of communication tools including the internet is significant in order to formal and informal childcare support network. Also, Geographical studies of “cyberspace” insist that it is important to understand the interaction of cyberspace and real space. To attain this understanding, it is valuable to examine how mothers raising children use cyberspace or Internet communities because the information, support and networks the mothers need are often strongly connected with the local area in which they live.

In order to examine how mothers living abroad use communication tools, the interview survey to Japanese mothers living in Germany and France, and the analysis of information on two online communities, “pregnancy, childbirth, child-rearing in Germany” and “working mothers in France”, in one of the most popular Japanese social networking services “Mixi”. The mothers living in Germany are facing little availability of formal childcare services, compared to in France. Over-distance support is provided by Japanese family members at the time of childbirth or hospitalization. They also use Skype or email to receive the daily emotional support. On the online communities, they exchange information of local childcare services, referral of babysitters or nannies who can speak Japanese, and the offline meetings in real space.

GEOGRAPHY IN ECONOMIC AND TERRITORIAL DEVELOPMENT POLICIES: ECONOMY OF RESOURCES AND AGGREGATION OF PARISHES IN PORTUGAL

Authors: *Marcia da Silva*, Universidade Estadual do Centro-Oeste (UNICENTRO), Brazil; *Karla Rosário Brumes**, Universidade do Centro Oeste do Paraná - UNICENTRO, Brazil

Keywords: aggregation of parishes, political-territorial control, Portugal

Abstract: Some European Union countries have undergone control processes, in various areas, imposed by the European Commission, the European Central Bank, and the International Monetary Fund. These restrictions have led to interference in the dynamics of each country's territory, in accordance with the determinants pre-established for each country. This paper discusses the administrative-territorial re-planning in Portugal by analyzing the “agglomeration of parishes” process, based on the case study of the Amadora municipality, a part of Greater Lisbon. The analysis revealed that, one year on from parish agglomeration, little had changed in terms of competences, functionalities, and the primary objective of the process, which was an economy of resources. On the other hand, however, the analysis showed that the international agreements of the Economic Assistance Program were being met with little or no concern about social issues arising from its implementation; in the case of Amadora, the re-planning enabled significant improvement in the distribution of services in the territory.

DILEMMAS OF THE HUNGARIAN-SERBIAN CROSSBORDER AREA FROM THE PERSPECTIVE OF THE LABOUR MARKET

Authors: *Andras Donat Kovacs**, HAS Centre for Economic and Regional Studies, Hungary; *Jenő Farkas*; *Éva Perger*

Keywords: Hungary, labour market, rural development, Serbia

Abstract: The social-economic problems of the Serbian-Hungarian border region are very complex and critical in many respects. The effects of unfavourable processes on our everyday life have become quite perceivable even in the labour market, due to which there have been accumulated serious tensions of employment in these areas of fundamentally provincial character.

The main conceptual starting point of our research (LOLAMAR HU-SRB IPA; www.lolamar.eu) was that the local labour-market situation in the affected areas could be improved significantly over conscious planning of cross-border opportunities, the revival of labour-exchange partnerships, adapting the best international practices and creating some new forms of social co-operations. With our results, we also want to draw attention to the excluded and inactive groups that should be observed as local resources, whose reintegration into the labour market may strengthen local economy and society as well.

FROM PLANT TRAITS TO THE FLUVIAL LANDSCAPE: DIFFERENT TOOLS AND METHODS FOR A MULTI-SCALE STUDY OF INTERACTIONS BETWEEN RIPARIAN VEGETATION AND HYDROGEOMORPHIC PROCESSES

Authors: *Borbála Hortobágyi**, Université Clermont Auvergne, Université Blaise Pascal, GEOLAB, BP 10448, F-63000 CLERMONT-FERRAND, CNRS, UMR 6042, GEOLAB, F-63057 CLERMONT-FERRAND, France; *Dov Corenblit*; *Jean-Luc Peiry*; *Johannes Steiger*; *Franck Vautier*

Keywords: hydrogeomorphic processes, multi-scale study, plant traits, riparian vegetation dynamics, spatial analysis

Abstract: Within fluvial systems interactions between water, sediment and vegetation play an important role in fluvial landscape dynamics. Hydrogeomorphic processes affect vegetation dynamics by destruction or offering freshly deposited sediment for its installation. In turn, vegetation modulates sediment dynamics and water flow. We addressed two main questions in an effort to

better understand feedbacks between riparian vegetation and hydrogeomorphic processes from plant response traits, i.e. properties that provide an adaptive response to water flow, sediment erosion and deposition, to the fluvial landscape: (1) How does riparian vegetation respond to hydrogeomorphic constraints in terms of spatial pattern of vegetation resistance and resilience? (2) How and to what extent do response traits of engineer plants affect fluvial landscape dynamics? Here we developed a nested multi-scale approach in order to respond to these questions of different nature, i.e. from the plant trait to the landscape, and present the appropriate tools and methods which have to take into account each particular scale. Plant traits were quantified during detailed field work on *Populus nigra* L. individuals and ligneous pioneer vegetation patches. Fluvial landforms such as vegetated point bars were studied to identify the spatial pattern of pioneer vegetation using a combined field and photogrammetry (drone) approach. Finally, a diachronic spatial analysis was carried out at the corridor scale using GIS (2D) and photogrammetry (3D) based on archival aerial photographs. Such a multi-scale approach contributes to the integrated analysis of biogeomorphic cross-scale interactions within vegetated fluvial corridors and, ultimately, to improve self-sustainable river restoration efforts.

GLACIOAQUATIC SEDIMENTS AND LANDFORMS IN LIELAUCE GLACIAL DEPRESSION, WESTERN LATVIA

Authors: *Ivars Strautnieks**, University of Latvia, Latvia; *Ineta Grīne*, Latvia; *Laimdota Kalnina*

Keywords: glaciolimnic, glaciotectonics, internal structure, rafts

Abstract: Study area of Lielaue glacial depression is located on the Eastern Kursa Upland, Western Latvia. It lies among radial and frontal moraine ridges and has a North-South linearity corresponding to the ice flow direction. According to the geological mapping, glaciofluvial deposits are distributed at the eastern part of depression, while glaciolimnic clays and silt are common in flat or undulated western part. Glaciolimnic plain includes several flat areas with different surface hypsometry, which vary 102-117 m a.s.l. and probably reflects the evolution of the Lielaue basin.

In the middle part of the Lielaue depression glaciolimnic sediments have been found at the tops and slopes of 6-9 m high, 100-500 m long and 50-200 m wide landforms. They have anticline folds, which limbs dip reach 18-26°.

Vertical glaciofluvial deposit layers have glacioadvective structures in the cores of landforms. Diamicton imbricate scales and thrust planes have been exposed at the northern or proximal slopes. Rafts of the deformed glaciolimnic clays, boudinage structures, recumbent folds and diapirs are found in landform's cores. Rafted blocks of glaciolimnic clays and folds have been recognised in ridges at the southern part of glaciodepression, where they are covered by glaciofluvial deposits. Internal structure of landforms suggests their formation under the glaciotectonic processes. It proves that glaciolimnic clays, which form ridges are not „in situ” and their age probably differs from the horizontally laying varved clays.

Results of study indicate very complicate formation conditions of the depression, therefore more detailed investigation of internal structure of landforms is necessary.

SEDIMENT STORAGE QUANTIFICATION AND POSTGLACIAL EVOLUTION OF A SMALL ALPINE CATCHMENT (DOAMNEI VALLEY, FĂGĂRAȘ MOUNTAINS, ROMANIA)

Authors: *Ardelean Adrian Cristian**, Romania; *Ardelean Adrian Cristian*, Romania; *Alexandru Lucian Onaca*, West University of Timisoara, Romania; *Urdea Petru*, West University of Timisoara, Romania

Keywords: denudation rates, ERT, GPR, postglacial evolution, sediment storage quantification

Abstract: Sediment storage analysis and quantification plays an essential role in establishing postglacial evolution within the increasingly vulnerable alpine environment. With no data currently available on sediment volumes and mean denudation rates for the Carpathian Mountains, the current study aims to provide the first quantitative analysis regarding postglacial evolution within an alpine sector of the Southern Carpathians (Doamnei Valley, Făgăraș Mountains, Romania).

Sediment storage volumes and postglacial evolution of this small alpine catchment (3,5 km²) were reconstructed using a multi-method approach, comprising several field investigations (Ground Penetrating Radar and Electrical Resistivity Tomography) and GIS modeling. Detection of bedrock depth and quantification of sediment volumes was performed with respect to individual sediment storage landforms. Cross validation results (between GPR and ERT data) have pointed out similar results in bedrock detection, thus landform thickness was individually investigated for a several landforms using over of 50 GPR profiles and 10 ERT profiles.

The results point out that slope deposits (talus sheets and cones) are the dominant landforms within the investigated area, followed by moraine deposits. Sediment volumes have been used to estimate mean annual denudation rates, for different landform types, as well as rock wall retreat rates, based on a time span of 10 -20 ka.

THE EFFECTS OF THE UNIVERSITY PRESENCE ON THE LOCAL ECONOMIC DEVELOPMENT – A CASE STUDY OF ȘTEFAN CEL MARE UNIVERSITY OF SUCEAVA, ROMANIA

Author: *Ionela Corina Chirileasa (Dediță)**, University of Bucharest, Romania

Keywords: cooperation, leadership, regional advantage, regional development, university

Abstract: In the context of knowledge-based information society, universities are increasingly recognized, in the literature, as having a key role to play in the regional development process. These higher education institutions are distinguished as actors involved in a variety of relationships with its insertion environment, having the capacity to go a long way towards his transformation. By contributing that they bring to the development of human qualified resources, to the regional innovation and through the participation to the regional leadership, the universities are the institutions that participate to the economic development of the

insertion environment. This research aims to analyze the contribution that the University “Stefan cel Mare” from Suceava, located in the Northern – Eastern Region of Romania, bring it to the economic development of the city in which it is located and its influence area. The emphasis is on: analysis of the relationship that established between the need for highly qualified labor force that exists to the locally level and the qualifications provided by The University; the direct participation of The University and its employees on to the local committees and boards, the provision of technical resources and support.

ASSESSMENT OF TERRITORIAL REPRESENTATIONS IN GEOGRAPHY TEXTBOOKS: A TOOL CALLED “TOPOGRAPHICAL NAMES MAP”

Authors: *Miroslav Sifta**, Charles University in Prague, Faculty of Science, Czech Republic; *Jan Hatle*; *Silvie Rita Kucerova*; *Katerina Novotna*

Keywords: cartography, geography education, geography textbook, territorial identity, The Czech Republic

Abstract: The poster introduces several selected results (maps) of textbooks assessment, that demonstrate the differences in territorial representation of observed North-western Bohemia region during time in the best way. In the era of communistic dictatorship, governing in Czechia between 1948–1989, particularly the territories and symbols connected with mining, heavy industry and power industry were adored. In the maps there are visible the topographical names of natural resources localities, of industrial cities and even the names of particular concerns and power plants. Almost opposite trend appeared after fall of the communism, when this type of areas was losing a principal economical position and in the analyzed textbooks the region turned to a symbol of environmental and social problems. The positive activities or phenomena (like e.g. natural protected areas and cultural heritage) were purposely suppressed in the presentation of the whole region. Contemporary textbooks tend to be more thematically balanced in the territorial representation. Nevertheless, these textbooks have already mirrored the competitors fight between various publisher houses. They have fashioned the presentation of territories to demand on market with learning texts according to the regional image that textbook users (especially teachers) anticipate.

LAND COVER CHANGES OF NATURE CONSERVATION AREAS BETWEEN 1990 AND 2006 – CASE STUDY FROM THE KISKUNSAĞ NATIONAL PARK

Authors: *Jenő Zsolt Farkas**, HAS Centre for Economic and Regional Studies, Hungary; *Andras Donat Kovacs*, HAS Centre for Economic and Regional Studies, Hungary

Keywords: landscapes, nature conservation, transformation

Abstract: The socialist state system has radically transformed after the transition in Hungary. In this context one of the most important step was to give the former community property into private hands. In the primary sector the former land owners could get new farm land during the compensation process. National Parks had a special role, which meant they had pre-emptive right to buy the protected areas. Before 1990 the state and the national parks owned only a small percent of the protected areas, because the former agricultural cooperatives were the most important land managers. This situation changed briefly because the state gave subsidy for land buying to the national parks in the compensation process, and after that this system remains until the mid 2000's. In this research we would like to investigate the land cover changes of the protected areas according to the changes in the ownership and in the management. We analyse the CORINE Land Cover Changes databases between 1990 and 2006. After we determine a broader picture we mainly focus on the Kiskunság National Park, and we try to identify their methods and results how the agricultural land has transformed to semi natural areas. The actuality of our research is that the Hungarian government decided to give 20 % of protected areas to the National Land Management Organisation at the end of 2014. The results interpreted in the paper rested mainly on the research supported by the Hungarian Scientific Research Fund – OTKA 109269.

TRANSDISCIPLINARY INNOVATION AND EXCELLENCE IN TEACHING GEOGRAPHY AT UNIVERSITY

Authors: *Asuncion Blanco-Romero**, Dep. of Geography., Universitat Autònoma de Barcelona, Spain; *Jaume Barrera-Fusté*; *Sandra Saura-Mas*

Keywords: geography education, innovation, methodology, transdisciplinarity, macroconcept, constellation

Abstract: The experience presented reflects the need for innovation and optimization towards academic excellence that the new EEES framework requires, based on a first-year course in geography. The implementation process was to adopt a transdisciplinary methodology, given the need to foster in students the knowledge, skills and attitudes for which the disciplinary educational models are not designed. In a society in constant change and in a geography subject whose main aim is to update the constructive knowledge of present time, only a methodology that relates different knowledge regardless of the disciplinary logic could achieve it. A large teaching team designed a wide variety of methods of transdisciplinary implementation based on the labyrinth theory, and focusing on what we call “design constellations.”

ESTIMATION OF LAND VALUE DAMAGE CAUSED BY LANDSLIDES BY MEANS OF MATRICES FOR DIFFERENT DEGREE OF KNOWLEDGE: A CASE STUDY FROM MOLISE REGION (ITALY)

Authors: *Vittoria Scorpio**, Università degli Studi del Molise, Italy; *Pietro P.C. Aucelli*; *Dan Bălteanu*; *Luca Pisano*; *Carmen M. Rosskopf*; *Veronica Zumpano*

Keywords: Economic damage, landslide, rural area, susceptibility analysis

Abstract: Slope instability due to mass wasting and accelerated water erosion represents a great threat for the safety of inhabited areas and a fundamental aspect of physical and socio-economic vulnerability estimations and related actions for risk management and mitigation. In this work, we present a method for the evaluation of the economic impact of landslide phenomena on rural areas where main economic resources are frequently directly based on agricultural and pastoral activities. Mass wasting reduces the quality (suitability) of these lands to be exploited determining de facto directly and/or indirectly a negative impact on the gross domestic product. The assessment of damage induced by landslides in such areas, thus, provides an important contribution to support decision making concerning the sustainable management of land use.

A methodological GIS-based approach for valuing the economic damage induced by landslides has been developed and is presented for rural areas located in Molise region in southern Italy. It allows direct damage estimation related to landslide phenomena by means of a synthetic approach. This approach considers the loss of land value associated with the temporal and spatial distribution of different types of landslides affecting the analyzed territory and uses specific matrices which specifically account for different degrees of knowledge on landslide phenomena. The developed method allows furthermore to evaluating also the potential damage associated to landslide exposition of rural areas by means of a bivariate susceptibility analysis.

CULTURAL CONVERSION OF WATER TOWERS – A TOOL FOR CONSERVING INDUSTRIAL HERITAGE ASSETS

Authors: *Florentina Cristina Merciu**, The Interdisciplinary Center for Advanced Research on Territorial Dynamics, University of Bucharest, Romania; *Loreta Cercleux*; *George Merciu*; *Vlad Paunescu*

Keywords: cultural environment, place names

Abstract: Water towers are symbolical landmarks that refer to the industrialization. The water towers are technical and industrial assets whose future evolution is a sensitive matter as a result of the economic context that brought about the shutdown of numerous industrial enterprises and abandoning infrastructure assets. Some water towers were included on the worldwide cultural-heritage list, thanks to the manifold values they incorporate (technological, historical, architectural, esthetical, among others). In this context, it has become necessary to convert them, with the twofold purpose of conserving them and assigning them a new function.

Water towers are considered industrial-heritage assets and they are included in the category service industries mainly water. Most water towers are associated with railway stations, as it is a known fact that railway transport has had a significant contribution to the development of industry. At the same time, water towers were also used to supply industrial areas, as water was needed in manufacturing processes. Also, they are the oldest forms of water storage built to supply major cities.

The present study focuses on the analysis of water towers from a cultural perspective, highlighting on the one hand their quality as cultural assets, and on the other hand the multiple opportunities for their conversion. A number of suggestions were made regarding the conversion of some valuable water towers nationwide.

Reusing water towers is a form of conserving, as well as capitalizing in an improved manner, frequently meaning an alternative course of action to demolishing them.

INTERACTIVE WEATHER FORECAST LAB AT THE EÖTVÖS LORÁND UNIVERSITY, BUDAPEST

Authors: *Zsuzsanna Dezső*, Eötvös Loránd University Department of Meteorology, Hungary; *Judit Bartholy**, Dept. of Meteorology Eötvös Loránd University, Hungary; *Ádám Leelőssy*; *Attila Merics*; *Tamás Mona*

Keywords: higher education, msc students, synoptic meteorology, weather forecast

Abstract: Practical experience in the education of students in meteorology is important thus enabling to develop necessary skills for young forecaster meteorologist for real weather prediction. To fulfill this aim, a new practice-oriented program has been introduced in the Synoptic Meteorology Laboratory at the Eötvös Loránd University.

In addition to traditional classroom lectures, students have the opportunity to use in practice the HAWK-3 meteorological workstation, the operationally used visualization tool of the Hungarian Meteorological Service. Using this tool and the meteorological information available on the internet, students participate in entire week long operational task for actual weather prediction. The students prepare weather forecasts on each day, and these are regularly published at the website of the Department of Meteorology. In the Synoptic Meteorology Laboratory public prognosis discussion is organized every day at noon, this is lead by the students on duty.

Another important activity of the Synoptic Meteorology Laboratory is the weather forecast competition. In each semester, once a week any student, lecturer, professor may submit forecast for a specific time and place according to the guidelines available on the website of the competition. The forecasts are verified and compared to the persistence prognosis, then, at the end of each semester accumulated forecast skill scores serve as ranking the participants.

With this complex education program, students get familiar with modern techniques in weather forecasting, they gain a lot of practical experience with real weather situations, which will be beneficial after graduating and starting to work as “official” forecasters.

THE EFFECT OF LARGE SCALE SYNOPTIC-CLIMATOLOGICAL CHANGES IN THE CARPATHIAN BASIN

Authors: *Zsuzsanna Dezső*, Eötvös Loránd University Department of Meteorology, Hungary; *Judit Bartholy*, Dept. of Meteorology Eötvös Loránd University, Hungary; *Rita Pongrácz**, Dept. of Meteorology Eötvös Loránd University, Hungary; *Anna Zsilinszki*

Keywords: Arctic Oscillation, Carpathian Basin, jet stream, North-Atlantic Oscillation

Abstract: Recently, several unusual weather events have occurred in the Carpathian Basin. For example huge amount of precipitation was detected both in winter and spring 2012-2013, as well, as in summer 2014. According to our hypothesis these extreme wet conditions in the region are related to the jet stream in the upper tropospheric levels. This paper aims to evaluate our base hypothesis, and quantify the relationship between regional meteorological events and the jet streams over Europe.

First, a general statistical analysis of jet stream characteristics is performed for the region, including the evaluation of (i) the frequency of those days when a jet stream is located above the Carpathian Basin, (ii) the typical height of the jet core, (iii) the jet wind vector consisting of wind speed and direction, and (iv) the relationship between the jet and local/regional weather events. Detected changes of the position and the intensity of the jet stream is also analyzed for the last few decades. Furthermore, teleconnection patterns, i.e., the North-Atlantic Oscillation (NAO) and the Arctic Oscillation (AO), which are closely linked to the jet stream, are also examined. In addition to the jet stream, these teleconnection systems are also linked to the local weather conditions, therefore, correlation patterns are calculated between daily data of various meteorological elements and daily NAO and AO index values for 30 years (1981-2010), and for specific seasonal and monthly time scales for the Carpathian region.

EVALUATION OF THE ROLE OF VEGETATION IN URBAN CLIMATE

Authors: *Rita Pongrácz**, Dept. of Meteorology Eötvös Loránd University, Hungary; *Judit Bartholy*, Dept. of Meteorology Eötvös Loránd University, Hungary; *Zsuzsanna Dezső*, Eötvös Loránd University Department of Meteorology, Hungary; *Cathy Fricke*, *Gergely Molnar*

Keywords: normalized difference vegetation index, satellite measurements, surface temperature

Abstract: About 1.7 million inhabitants are living in the Hungarian capital, Budapest, which consists of 23 districts altogether. The entire city is divided by the river Danube into a hilly, greener Buda side on the west, and the flat, more densely built-up Pest side on the east. Most of the extended urban vegetation, i.e., forests are located in the western Buda side. The effects of the past changing of these green areas are analyzed using surface temperature data calculated from satellite measurements in the infrared channels, and NDVI (Normalized Difference Vegetation Index) derived from visible and near-infrared satellite measurements. First, the climatological effects of forests on the urban heat island intensity are evaluated. Then, we also aim to evaluate the relationship of surface temperature and NDVI in this urban environment with special focus on vegetation-related sections of the city where the vegetation cover either increased or decreased remarkably, e.g., recently built shopping centers in previously vegetated area or brown industrial area where low quality vegetation appeared in the past decade.

STUDY OF THE SURFACE DEVELOPMENT AND VALLEY GEOMORPHOLOGY BY MULTIVARIATE DATA ANALYSIS IN PAKS-DUNAKÖMLÖD LOESS PLATEAU, HUNGARY

Authors: *Tamás Végő**, Eötvös Loránd University, Department of Physical Geography, Hungary; *Balázs Bradák*, *Erzsébet Horváth*, Eötvös Loránd University, Dept. of Physical Geography, Hungary; *József Kovács*, Eötvös Loránd University, Budapest, Hungary; *Norbert Magyar*

Keywords: geomorphometry, loess, multivariate data analysis, surface development, valley morphology

Abstract: The goal of our research to determine the stages of valley development on the Paks-Dunakömlöd loess plateau by the joint method of field research, GIS and multivariate data analysis and describe the various stage of valley development and the influence of various surface processes.

The analysis of the complex valley system of the study area based on the 5 m/pixel digital surface model. 896 valley profiles characterized by seven descriptive valley morphological parameters.

The analysis of the valley profile consisted of the following steps:

- Various group of profiles were separated by the hierarchical cluster analysis of the morphological parameters of the valleys.
- The hypothetical groups created by cluster analysis were tested and revised by discriminant analysis.
- Based on the accuracy of the parameters and its possible failure, the stability of the grouping profiles were examined.
- The important background processes which has important role during the valley development were characterized by Principal Component Analysis.

A new method was applied for the classification of a valley system, developed by various surface processes. The following valley types were defined:

- Embryonal shallow valley section without valley side in the valley head
- Juvenile valley section with valley side, and deepening profile
- Juvenile tapering valley section, with narrow valley floor
- Juvenile/Mature opened valley section with asymmetrical sides
- Mature with dichotomous valley side.
- Mature, complex valley section.

Beyond the classification of the valley profiles, the stages of the development of the valley system were determined by the characterization of the valley profile of the groups.

THE DISTRIBUTION OF IT SECTOR COMPANIES IN BELGRADE: A SPATIAL ANALYSIS

Author: *Nikola Jocić**, Bamberg University, Germany

Keywords: Belgrade, creativity, knowledge economy, postsocialist transition, transformation

Abstract: After years of economic degradation, wars and isolation, Serbia entered into period of delayed political, economic and social transition. In the last decade knowledge economy is getting more important and the growth of IT sector is the biggest in the complete Serbian economy (200% higher than in the rest of economy). The export of the IT sector exceeds 200 million euros per year and, thus marks it as one of the most important sectors of the domestic economy. The largest part of the IT sector is located in the biggest cities, Belgrade and Novi Sad. As just a few companies are large enterprises, the biggest part of this sector is formed by micro, small and middle-sized companies. This poster will show the spatial distribution of IT companies in Belgrade. Their “hot spots” – neighborhoods with the highest density – will be marked. Results can be used to identify conditions for creating urban IT sector zone. Moreover, it will be analyzed what forces lie behind that spatial development and what urban functions are following it.

THE PHYSICAL AND SOCIAL GEOGRAPHICAL ASPECTS OF REHABILITATION PROJECTS ON THE HIGH BLUFFS THREATENED BY LANDSLIDES AND COLLAPSES ALONG THE DANUBE RIVER AND LAKE BALATON IN HUNGARY

Authors: *István Viczán**, Geographical Institute, Research Centre for Astronomy and Earth Sciences of the HAS, Hungary; *János Balogh*, Geographical Institute HAS, Hungary; *Éva Kis*, Geographical Institute HAS, Hungary; *Ágoston Juhász*; *Zoltán Szalai*, Eötvös Loránd University / RCAES HAS, Hungary; *József Szeberényi*, Geographical Institute, RCAES HAS, Hungary

Keywords: Danube, high bluff, Hungary, Lake Balaton, physical and social geography

Abstract: The section of the high bluff which belongs to the inner parts of settlements, particularly threatened by mass movements is 86.4 km long along the Danube and 26 km at Lake Balaton. The estimated value of the elements to be protected in those area is 2,4 billion € at Danube and 0,42 billion € at Lake Balaton and the preventive engineering intervention would cost 244 million € and 87 million €, respectively. The studied areas are full of settlements and holiday resorts with major transport routes because of their exceptional geographical setting. Thus, the possible movement of the high bluffs presents not only a natural threat but a social risk insofar as the movement may cause serious damage to the buildings and infrastructure alike. Thanks to the opportunities offered by EU funding in the past decades, several significant preventive measures have been undertaken. The endangered areas such as settlements, road and railway sections are subject ever since to our monitoring activities and engineering geomorphological mapping. The anthropogenic aspects, such as insufficient water drainage, responsible for the renewal and acceleration of the movements are being investigated. During the cliff rehabilitation, construction and preventive works have been supervised and evaluated in order to assess how the technical interventions correspond to the geological conditions. We gave recommendations for increasing the slope stability and fitting the new construction in the landscape. Our research recommendations contribute to a safer, more liveable and sustainable environment along the Danube and Lake Balaton.

SPLIT TOWNS ON THE BORDERS OF THE STATES OF THE VISEGRAD GROUP

Authors: *Katarzyna Kulczyńska**, Adam Mickiewicz University in Poznań, Poland; *Barbara Konecka-Szydłowska*, Institute of Socio-Economic Geography and Spatial Management Adam Mickiewicz University in Poznań Dziegielowa 27 61-680 Poznań, Poland, Poland

Keywords: border, split town

Abstract: Split border towns are specific entities that once used to be single urban organisms, but owing to changes in the course of state borders they have been divided into two or more independent organisms belonging since that time to various states. They are characteristic primarily of East-Central and South-Eastern Europe, as this part of the continent shows the greatest fluidity in borders and changes in the territorial range of states.

This paper seeks to characterise the split towns occurring today on the borders of states belonging to the Visegrad Group, which includes Poland, the Czech Republic, Slovakia, and Hungary. As the authors have established, there are six pairs of such towns: (a) in the Polish-German borderland: Ślubice-Frankfurt Oder, Gubin-Guben, Łęknica-Bad Muskau, and Zgorzelec-Görlitz, (b) in the Polish-Czech borderland: Cieszyn-Česky Tešín, and (c) in the Slovak-Hungarian borderland: Komárom-Komárno. When establishing the number of those towns the authors relied on many works, including Ch. Waack's (2000), who distinguished nine pairs of such towns in Central and Eastern Europe.

The research procedure consists of three stages: (1) a concise presentation of the definitions and typological terminology concerning split towns, (2) an identification of split towns in the borders states of the Visegrad Group and their characterisation based on the criteria distinguished, like the number of times a town has been divided by a state border, the number and proportionality of parts after the last division and the time this happened, and (3) the genesis of split towns.

ADAPTING THE DUTCH ROOM FOR THE RIVER APPROACH IN ALBERTA, CANADA

Authors: *Eva A. Bogdan**, University of Alberta, Canada; *Andrew Wilson*

Keywords: engineering, flood risk, flood zones, floods, land use, local development, nature conservation, riverfront, urban planning

Abstract: The application of the Dutch Room for the River approach, which focuses on increasing river conveyance and reducing risk, is currently being explored in the province of Alberta, Canada. The province experienced major flooding in 2013, the most costly natural disaster in the history of Canada. Alberta, home to the largest oil sand operations in the world, has had the strongest performing economy in Canada in recent decades and historically focused on large-infrastructure mitigation approaches.

The estimated \$6 billion cost of the disaster, excluding mitigation expenses, and a growing sensitivity to the implications of

climate variability, has triggered reassessment of costly structural solutions. These solutions are seen as having significant impact on the environment. There is a growing focus on non-structural solutions including removal of artificial channel constrictions, conservation easements, restoration and retention of wetlands and riverbanks, floodplain development restrictions, and relocation.

Initial exploration and adaptation of the approach to Albertan conditions involved stakeholder input from water managers, watershed and environmental groups, municipalities, experts, and interested public. This research examines the process of applying and adapting the Dutch Room for the River approach to the development and evolution of Alberta's flood and watershed management.

FINANCIAL GLOBALIZATION: THE DISSEMINATION OF FOREIGN BANKS IN BRAZIL – THE SANTANDER'S CASE BANK

Authors: *Sandra Lúcia Videira Gois**, Universidade Estadual do Centro-Oeste – UNICENTRO, Brazil; *Samara Videira Zorzato*, Universidade Estadual Paulista -UNESP – IBILCE, Brazil

Abstract: To reflect about spatial dynamics by which banking network is passing through, it is necessary to research and comprehend the process which takes place from a worldwide movement and is relevant to the geography considering the current state of globalization of the economy and society.

Multi-site and multifunctional corporations are increasingly managing the territory in capitalist society, and the financial system is, by far, a key piece to represent and compose this mosaic of modern society.

Therefore, this paper discusses the spatial practices adopted by foreign banks and their distribution in Brazil. Consistent with this claim, was selected as a research subject the foreign Santander bank, of Spanish capital, which spread over several countries and especially in Latin America, lends itself well to an investigation of their spatial distribution in Brazil, seeking to unveil forms of territory management, for being the foreign bank with the largest presence in the Latin continent.

In Brazil, Santander bank is the result of expansion that has been consolidating since 1997 with the acquisition of internal banks, currently controlling more than 2,600 agencies.

Thus, we will follow in the direction of understanding the spatial spread of foreign banks, in Brazil, to understand why they would choose certain locations or relocate from new locational logistics, thereby defining the economic dynamics of a given territory and furthermore, the methods of managing large multi-site corporations.

THE HIGH PRECIPITATION EVENTS OVER LODZ AND ITS RELATION TO ATMOSPHERIC CIRCULATION

Authors: *Joanna Jędruszkiewicz**, Institute of Geography, Pedagogical University, 30-084 Kraków, ul. Podchorążych 2, Poland; *Mariusz Zieliński*, Department of Meteorology and Climatology, University of Lodz, Poland; *Bartosz Czernecki*, Adam Mickiewicz University in Poznan, Poland

Keywords: precipitation, urban climate,

Abstract: The main goal of this paper is the spatial characteristic of the high precipitation events over the city of Lodz. The precipitation totals from stations located in the city centre, suburban and rural areas were compared. The high precipitation events were studied in the light of different air mass inflow directions at 850 hPa. Furthermore, several indices defined by the Expert Team on Climate Change Detection and Indices (ETCCDI) e.g. monthly maximum 1-day precipitation (Rx1day), monthly maximum consecutive 5-day precipitation (Rx5day), precipitation intensity index – annual number of days with daily precipitation $\geq 10\text{mm}$ and $\geq 20\text{mm}$ (R10mm and R20mm), Simple daily intensity (SDII), annual total from days when daily total is equal at least 95 percentile and 99 percentile were computed.

UTILIZATION OF THE RAINFALL EROSIVITY INDEX AS AN INDICATOR OF LANDSLIDE OCCURRENCE ALONG THE SOUTHERN SLOPES OF THE BAČKA LOESS PLATEAU – CASE STUDY OF THE KULA SETTLEMENT, VOJVODINA (NORTH SERBIA)

Authors: *Tin Lukić*, *Igor Ivan Leščešen**, Department of Geography, Tourism and Hotel management, Faculty of Science, University of Novi Sad, Serbia; *Biljana Basarin*; *Dušan Sakulski*; *Andries Jordaan*; *Đurđa Miljković*; *Dragan Dolinaj*

Keywords: antropogenic landscape forming, geomorphological hazards, landslide

Abstract: The risk of soil erosion and landslides is one of the main environmental concerns in Southeast Europe. Changes in precipitation due to climate variability are expected in the south eastern parts of the Pannonian (Carpathian) Basin in the Vojvodina region, North Serbia. The Kula settlement on the southern slopes of the Bačka loess plateau in the Vojvodina region was selected for this study. Various statistical approaches were used to calculate and analyse trends in Total Annual Precipitation (Pt), the Precipitation Concentration Index (PCI), Fournier (FI) and Modified Fournier Index (MFI). Results show that precipitation concentration indicates a presence of moderate values for the period 1991–2012. Trend analysis of the supra-seasonal scales for wet and dry seasons only indicates the presence of a trend in the time series for the wet season (October to March). Calculated values of the FI and MFI generally display low aggressiveness for the study area with several extreme values with a pronounced severe erosivity class. These values strongly correspond with the registered occurrence of the landslides in the Kula settlement area. Understanding, analysing and interpreting the relationship between values of annual, seasonal and monthly trends of Pt, PCI, FI and MFI are of great importance to understand, predict and successfully mitigate landslides affected by excessive piping erosion alongside the loess cliff presented in this study. The above presented approach is useful to describe rainfall aggressivity evolution during 1991–2012 in the environment subject to a high erosion risk, mainly loess covered terrains.

ESTIMATION OF REGIONAL CLIMATE CHANGE TAKING INTO ACCOUNT RCP SCENARIOS

Authors: *Rita Pongrácz**, Dept. of Meteorology Eötvös Loránd University, Hungary; *Karolina Andre; Judit Bartholy*, Dept. of Meteorology Eötvös Loránd University, Hungary; *Ildiko Pieczka*

Keywords: med-cortex domain, precipitation, regional climate modelling, temperature

Abstract: Our research group is participating in the Med-CORDEX international initiative with the specific aim of contributing to the complex regional climate modelling database with RegCM4.3 experiments at 50 km horizontal resolution. RegCM is a 3-dimensional, sigma-coordinate, primitive equation model, originally developed by Giorgi et al. Currently, it is available from the ICTP (Abdus Salam International Centre for Theoretical Physics). Additionally, we aim to provide climate projection results for the Carpathian Region and its vicinity, for (i) detailed regional scale analysis, and (ii) specific impact studies to various end-users, impact researchers, and decision makers. For these purposes, we use HadGEM2 global model outputs (1951-2100) as initial and lateral boundary conditions (ICBC) for the entire MED-44 CORDEX area covering the extended Mediterranean region of Europe. The 50-km horizontal resolution RegCM-outputs serve as ICBC inputs for further downscaling using 10 km as a horizontal resolution for a smaller domain covering Central Europe with special focus on the Carpathian Region. After completing the historical experiments, future scenarios are run taking into account RCP4.5 and RCP8.5 scenarios, which are based on the radiative forcing change by 2100.

THE ROLE OF PROTECTED AREAS IN GEO-HYDROLOGICAL RISK REDUCTION: AN EXAMPLE FROM THE GENOA'S FORTS AND WALLS PARK (ITALY)

Authors: *Lara Fiorentini**, Municipality of Genoa, Italy; *Francesco Faccini*, University of Genoa, Italy; *Alberto Girani; Guido Paliaga*

Keywords: flash floods, Genoa, geo-hydrological hazard, territory maintenance, urban vulnerability

Abstract: The city of Genoa is an emblematic international case, as it is associated to an high geo-hydrological risk: in the last 50 years 16 flood events occurred, including 6 with serious socio-economic damages and casualties. Climatic changes and the complete urbanization of floodplains cause an increased geo-hydrological risk. Local institutions propose structural and non-structural measures and monitoring activities for risk reduction, through short to long period programs of works. This contribution focuses the attention of the Genoa's Forts and Walls Park role in strategies about geo-hydrological risk reduction of Bisagno and Polcevera stream basins and for the old city stream catchments. Located on the ridges behind the historic centre of Genoa, a boundary between city and nature, the Protected Area can be strategic in the protection of the city from a geo-hydrological point of view. Established in 2008, however, the natural area has a fragmented institutional management and its maintenance is neglected. The Genoan flood events of 2011 and 2014 evidenced once again that the flood discharge is associated with suspended solids like mud, sand, gravel and plant material. The hazard in upper catchments involves a serious risk to the urbanized valley. Among the aims of the protected areas are the defense and recovery of the geo-hydrological asset: planning of ordinary and extraordinary maintenance and awareness raising of local institutions and citizenship in the care of peri-urban areas are considered essential for this Park.

SPATIAL DIFFERENCES IN MINERAL DEVELOPMENT OF MEADOW SOILS

Authors: *Zoltán Szalai**, Eötvös Loránd University / RCAES HAS, Hungary; *Kata Horváth-Szabó*, Department of Environmental and Landscape Geography (Institute of Geography and Earth Sciences, Faculty of Science), Eötvös Loránd University, Hungary; *Gergely Jakab*, Geographical Institute RCAES HAS, Hungary; *Klaudia Kiss; Balázs Madarász*, Geographical Institute RCAES HAS, Hungary; *Tibor Németh*, Institute for Geology and Geochemical Research, Research Centre for Astronomy and Earth Sciences, HAS, Hungary; *Péter Sipos*, Institute for Geology and Geochemical Research, Research Centre for Astronomy and Earth Sciences, HAS, Hungary; *Marianna Ringer*, Department of Environmental and Landscape Geography (Institute of Geography and Earth Sciences, Faculty of Science), Eötvös Loránd University, Hungary

Abstract: Soil development under hydromorphic conditions may results intense mineral transformation and rapid vertical differentiation in the profile. Original papers refer more than hundreds of years for this kinds of mineral transformations. We suppose that this process could be more rapid. Present paper focuses on the profile development of a sandy meadow soil (calcic, gleyic Phaeozem ferric, arenic) from the soil mineralogical viewpoint. The main aim was to explore the degree of mineral phase alteration via soil formation during a half-century under hydromorphic conditions. The studied soil is located in a swampy area (near to Ceglédbercel, Hungary). The parent material deposited during an extremely heavy flood event in 1963. The reference (parent) material can be found near to the study site. We combined routine field tests (carbonate content, dipididil test) with laboratory measurements (selective extractions for the determination of amorphous and crystalline Fe, and Mn content; X-ray phase analysis; X-ray fluorescence spectroscopy; particle sizing by laser diffraction; NDIR and FT-IR and DRS spectrometry), whereas Eh and pH measured by field monitoring station. The most intense mineralogical transformations developed in the zone of the heaviest redox oscillation. Results show that well developed horizons have emerged during fifty years in the studied soil. This time was enough for bivalent and trivalent iron mineral crystallisation and smectite formation in this zone. The high proportion of amorphous and colloidal phases refers to very intensive recent processes. Soil formation under hydromorphic conditions proceeds at higher speeds contrariwise to the century time scale reported in sources (discussing non-waterlogged cases).

Support of the Hungarian Research Fund OTKA under contracts K100180 (for Z. Szalai) and K100181 (for T Németh) are gratefully acknowledged

STUDIES ON PALEOENVIRONMENTAL CHANGES: ANALYSES OF LOESS AND LOESS-LIKE SEDIMENTS ON SUSAK ISLAND IN THE ADRIATIC

Authors: *Éva Kis**, Geographical Institute HAS, Hungary; *Ferenc Schweitzer*, Geographical Institute, HAS, Hungary; *Dénes Lóczy*, University of Pécs, Department of Physical and Environmental Geography, Hungary; *Andrija Bogнар*; *János Balogh*, Geographical Institute HAS, Hungary; *József Szeberényi*, Geographical Institute, RCAES HAS, Hungary; *István Viczián*, Geographical Institute, Research Centre for Astronomy and Earth Sciences of the HAS, Hungary; *Tímea Prodan*, Geodetic and Geophysical Institute, RCAES, Hungary

Keywords: quaternary, paleoenvironment, loess-paleosol serie, Susak Island, granulometric parameters

Abstract: An important component of this study was the determination of simple and easily accessible information about paleogeographic and paleoenvironmental conditions in the region during the Pleistocene. The study has been aimed at a detailed investigation of a loess profile and at making it a key section in a southern region of loess formation on Susak Island in the Adriatic Sea. Susak Island is a real attraction for geologists and geomorphologists. The aim of our investigations was to explore the evolution of loess platform and the landforms on island in Kvarner Bay. The differentially developed loess-paleosol sections provide a detailed terrestrial record of the Quaternary on Susak Island. Stratigraphic, geomorphologic and modern granulometric analyses have yielded a wealth of information on the evolution history of the island.

The sedimentary parameters of the Susak section were determined by our own new environment-discrimination proxies, which include beyond the traditional sedimentary parameters our newly introduced indices (fineness grade and degree of weathering). On the basis of granulometric parameters related to different physical environments can be distinguished along the profiles.

CHANGES IN RAINFALL REGIME AND GEO-HYDROLOGICAL EVENTS: AN EXAMPLE FROM CHIAVARI CITY AREA (EASTERN LIGURIA, ITALY)

Authors: *Paola Giostrella**, Irpi Cnr, Italy; *Maurizio Alberti*; *Francesco Faccini*, University of Genoa, Italy; *Massimo Melillo*; *Elisabetta Napolitano*; *Roberto Picasso*

Keywords: climate change, flash floods, geo-hydrological risk, heavy rainfall

Abstract: Disastrous floods in the Ligurian Region have frequently increased in the last few years, which may be a signal of important changes in the rainfall regime. The contribution covers the case study of the Chiavari area, located in Tigullio Gulf. Since 1883, the Weather-Seismic Observatory has been collecting rainfall data in Chiavari. The Observatory's archive is a very rare and precious data source that has helped the reconstruction of historical series for 130 years. From analyzing annual and monthly rainfall data we can see the variation of rainfall regime, especially the intensity that passes from light to more durable, heavy, torrential rainfall within a few hours. The distribution of rainfall events also changes from an equal dispersion during the year to a heavier amount within a few months. Climate-related geo-hydrological risk is more evident during autumn, where it increases. By analyzing daily rainfall data of the most important flood events from 1883 to 2014 in the Chiavari area, we can characterize the climate variation and the different ground impact and the relative consequences for the local community. We have considered how the resilience of the community's strategies change after an important geo-hydrological event. This is due to the most important rainfall events during the 130-year period in this special area, which has become an important historical archive.

INDEX OF NAMES

- Abrantes, Patrícia 37, 103
 Acar, Zeynep Selin 51, 161
 Adamo, Francesco 47, 143
 Adorján, Balázs 45, 137
 Afferni, Raffaella 60, 62, 199, 211
 Alberti, Maurizio 72, 249
 Amato, Vittorio 46, 47, 143, 144, 145
 Amiri, Nader 49, 155
 Amodio, Teresa 47, 144
 Ana-Maria, Pop 33, 81
 Ancilli, Stefano 41, 58, 121, 193
 Andó, Anita 37, 102
 Andráško, Ivan 51, 52, 164, 165, 167
 Andre, Karolina 52, 72, 168, 248
 Angelaccio, Michele 58, 192
 Anna, Mydlová 58, 191
 Appiotti, Federica 36, 43, 99, 130
 Apsite-Berîna, Elina 38, 66, 104, 228
 Arday, István 40, 117
 Ardelean, Florina 44, 51, 133, 134, 163
 Ardelean, Mircea 51, 163
 Arsenovic, Daniela 32, 66, 76, 227
 Árvay, Anett 50, 157
 Ásványi, Katalin 36, 98
 Aubert, Antal 35, 92
 Aucelli, Pietro P.C. 53, 71, 172, 244
 Auci, Sabrina 57, 188
 Augustyn, Anna Maria 55, 56, 180, 181
 Azaryahu, Maoz 50, 156, 157, 158
 B. Pristýák, Erika 35, 96
 Babej, Ján 53, 170
 Bagoly-Simó, Péter 40, 116, 118, 119
 Baias, Ștefan 41, 123, 124
 Bajat, Branislav 52, 168
 Bajerski, Artur 63, 213
 Bajmócy, Péter 61, 206
 Bajsanski, Ivana 32, 79
 Bajtalan, Hunor 31, 38, 75, 106
 Bakić, Olgica 44, 134
 Bakogiannis, Efthimios 58, 191
 Bakucz, Márta 35, 92
 Bal, Izabela Daria 66, 227
 Bálint, Dóra 34, 89
 Balizs, Dániel 35, 48, 93, 149
 Balogh, János 45, 46, 53, 71, 72, 137, 142, 171, 239, 246, 249
 Balogh, Péter 31, 58, 73, 74, 194
 Bălteanu, Dan 46, 71, 143, 244
 Bán, Attila 52, 164
 Banos, Arnaud 37, 103
 Banski, Jerzy 69, 234, 235
 Baraldi, Sara Bonini 33, 81
 Bárány-Kevei, Ilona 39, 113
 Barna, Ciprian 56, 181
 Barrera-Fusté, Jaume 71, 243
 Barta, Gabriella 55, 178, 179
 Bártfai, Endre György 35, 97
 Barthel, Martin 34, 85
 Bartholy, Judit 32, 52, 53, 71, 72, 76, 167, 168, 169, 244, 248
 Basaric, Jelena Ilija 44, 134
 Basarin, Biljana 72, 247
 Basili, Alessandra 58, 192
 Bata, Teodóra 40, 116
 Battisti, Gianfranco 56, 184
 Batunova, Elena 67, 229
 Baylina, Mireia 54, 174
 Bee, Beth 41, 121
 Behnke, Yvonne 40, 117
 Belliggiano, Angelo 56, 181
 Benedek, Jozsef 38, 106, 108
 Benke, Szabolcs 54, 176
 Berényi B., Eszter 61, 205
 Bergfeld, Annedore 35, 93
 Berki, Márton 64, 216
 Bernardo, Marcello 56, 62, 185, 210
 Bernatek, Anita 44, 134
 Bertagni, Marco 40, 120
 Bertalan, Laura 36, 101
 Berzi, Matteo 33, 83
 Berzins, Maris 66, 228
 Besson, Roger 41, 124
 Bianchi, Irene 43, 130
 Bihari, Zita 52, 167
 Bilska-Wodecka, Elżbieta 60, 61, 202, 208
 Biolek, Jaroslav 32, 52, 80, 166
 Biró, Marianna 41, 122
 Bite, Dina 38, 105
 Blagojević, Dragan 52, 168
 Blanco-Romero, Asuncion 71, 243
 Blanka, Viktória 36, 99
 Boavida-Portugal, Inês 37, 103
 Bodnár, Dorottya 36, 98
 Bodnár, Nikolett 37, 102
 Boehm, Richard 40, 119
 Bogacka, Emilia 41, 123
 Bogdan, Eva A. 36, 53, 71, 99, 170, 246
 Bognar, Andrija 72, 249
 Bognár, Zita 58, 191
 Bokwa, Anita 32, 77
 Bonati, Sara 36, 99, 100
 Bonazzi, Alessandra 68, 231, 232
 Booyens, Irma 39, 111
 Boria, Edoardo 65, 223
 Boros, Lajos 50, 61, 158, 205, 206
 Bottlik, Zsolt 44, 45, 136, 137
 Boyle, Edward Kieran 33, 83
 Bozóti, András 35, 92
 Brabec, Karel 53, 170
 Brabec, Tomáš 61, 207
 Bradák, Balázs 55, 71, 178, 179, 240, 245
 Braden, Kathleen 41, 121
 Braunmüller, Péter 33, 81
 Brewer, Graham 36, 100
 Brumes, Karla Rosário 71, 241
 Brünjes, Jürgen 42, 128
 Buhaş, Sorin 41, 123
 Bujdosó, Zoltán 36, 98
 Burger, Martijn 57, 187
 Burgmanis, Ģirts 35, 37, 94, 104
 Burini, Federica 65, 67, 223, 229
 Burkart, Andreas 39, 113
 Bürkner, Hans-Joachim 33, 83
 Busquet, Grégory 65, 218
 Buttarazzi, Berta 58, 192
 Buzsik, Krisztina 35, 92
 Bykva Dognon, Oksana 69, 233
 Calignano, Giuseppe 47, 144

- Camelia, Slave 33, 82
 Casaglia, Anna 33, 34, 83, 84, 86, 87
 Casagrande, Gianluca 33, 82
 Cassi, Laura 59, 198
 Cassiers, Tim 33, 84
 Castaldini, Dorian 38, 106
 Castan Pinos, Jaime 58, 194
 Castañer, Mita 67, 230
 Castelnovi, Michele 66, 223
 Català Marticella, Rosa 69, 234
 Cavuta, Giacomo 56, 184, 186
 Cebotari, Sorin 38, 106
 Cejudo, Eugenio 56, 182
 Cekula, Zane 59, 198
 Celinska-Janowicz, Dorota 64, 218
 Centeri, Csaba 54, 176, 177
 Cercleux, Loreta 71, 244
 Cerić, Denis 49, 60, 154, 199
 Cezar, Morar 35, 96
 Chiaruttini, Maria Stella 57, 186
 Chignier-Riboulon, Franck 68, 233
 Chirileasa (Dediță), Ionela Corina 71, 242
 Chiroiu, Patrick 51, 162, 163
 Ciglič, Rok 39, 44, 112, 133
 Ciliberti, Diana 60, 200
 Ciupertea, Antonio Flavius 32, 77
 Clarisse, Didelon-Loiseau 31, 74
 Coggin, Graham Thomas 65, 221
 Colombo, Annamaria 65, 220
 Copus, Andrew 49, 153
 Coratza, Paola 38, 106
 Cordero Luciano, Anabella Ascensión 34, 84
 Corenblit, Dov 39, 71, 113, 241
 Coulon, Giada De 65, 220
 Cozma, Lujza Tünde 60, 199
 Cozzolino, Maria 58, 189
 Cristian, Ardelean Adrian 51, 71, 162, 242
 Cristian, Titus Man 39, 110
 Crljenko, Ivana 59, 196
 Croitoru, Adina-Eliza C 32, 52, 77, 167
 Csajka, Edina Sáriné 43, 133
 Csapó, János 35, 92
 Cseh, Valentin 71, 239
 Csizmadia, Norbert 6
 Csomós, György 57, 187
 Csorba, Péter 40, 116
 Csüllög, Gábor 39, 40, 112, 115
 Czajlik, Zoltán 44, 136
 Czapiewski, Konrad 48, 49, 152
 Czernecki, Bartosz 32, 71, 76, 247
 Czirfusz, Marton 63, 214, 215
 Czóbel, Szilárd 39, 113
 Czuppon, Viktória Csizmadiáné 43, 133
 Dax, Thomas 49, 55, 56, 153, 180, 181
 De Luca Picione, Giuseppe Luca 47, 144
 De Melo Melgaço, Lucas 50, 64, 65, 158, 218, 220, 222
 De Pascale, Francesco 56, 62, 185, 210
 De Rubertis, Stefano 56, 181
 de Ruffray, Sophie 31, 74
 De Siena, Luca 47, 144
 Deák, Bernadett 38, 105
 Deák, Márton 33, 44, 62, 81, 135, 211
 Dej, Magdalena 39, 109
 dell'Agnese, Elena 50, 159
 Dezső, Zsuzsanna 32, 71, 76, 244
 Di Felice, Giuseppe 60, 200
 Di Matteo, Dante 56, 184, 186
 Dian, Csenge 32, 76
 Djercan, Bojan 66, 227
 Djurdjev, Branislav S 32, 66, 76, 227
 Dobány, Zoltán 45, 137
 Dobány Jr., Zoltán 45, 137
 Dobrosavljevic, Tanja 54, 177
 Dobrovolny, Petr 32, 77
 Doležal, Pavel 49, 153
 Dolinaj, Dragan 72, 247
 Domaniewski, Stanislaw K. 34, 85
 Dorogi, Zoltan 43, 129
 Dragut, Lucian 44, 133
 Dubniczki, Kitti 45, 138
 Dudás, Gábor 38, 57, 107, 187
 Dumbrovská, Veronika 60, 204
 Duveneck, Anika 63, 213
 Efremova, Vera 61, 207
 Egedy, Tamás 61, 207, 208, 209
 Égerházi, Lilla 32, 79
 Egermann, Markus 43, 130, 131, 132
 Eisam Eldeen, Fatima 44, 136
 Ekaterina, Isaeva 59, 68, 198, 232
 El Ayadi, Nesrin 47, 147
 Elissalde, Bernard 31, 73
 Ellonen, Sakari 70, 238
 Epasto, Simona 56, 185
 Erőss, Ágnes 34, 50, 66, 85, 156, 157, 225
 Espallat Bencosme, Melissa 66, 225
 Evette, André 39, 112
 Evrard, Estelle 31, 73
 Fábíán, Szabolcs 44, 133
 Fabula, Szabolcs 50, 61, 158, 205
 Faccini, Francesco 46, 53, 72, 141, 171, 248, 249
 Fakeyeva, Liudmila 45, 138
 Farkas, Bertalan Péter 40, 119, 120
 Farkas, Jenő Zsolt 71, 243
 Farkas, Jenő 71, 241
 Farsang, Andrea 40, 116
 Fasano, Alessandra 58, 190
 Fehér, Zsuzsanna 36, 98
 Fekete, József György 51, 162
 Fekete Gadoczine, Eva 66, 225
 Feliu, Jaime 67, 230
 Ferrara, Alessandra 58, 189
 Ferrario, Carla 60, 199
 Ferreira, Carlos Cardoso 37, 103
 Fialová, Dana 60, 203, 204
 Fiedlerová, Klára 61, 207
 Filep, Béla 58, 194
 Filimon, Claudiu 56, 181
 Filimon, Luminița 56, 181
 Filipović, Dejan 52, 168
 Finka, Maros 37, 102
 Fiorentini, Lara 53, 54, 72, 171, 172, 248
 Fistola, Romano 58, 189
 Foggi, Bruno 59, 198
 Font-Garolera, Jaime 58, 60, 192, 204
 Fontes, Inês 37, 103
 Foote, Kenneth 50, 156, 157
 Forino, Giuseppe 36, 99, 100
 Fortini, Lucia 47, 144
 Fortuniak, Krzysztof 31, 76
 Fournier, Mauricette 49, 68, 69, 153, 231, 233
 Főző, Attila László 40, 120
 Franz, Yvonne 39, 58, 111, 194
 Frechen, Manfred 55, 179
 Fricke, Cathy 71, 245
 Friedberg, Marcella Schmidt di 36, 100
 Friesenecker, Michael 39, 111

- Frondizi, Federica 59, 198
 Fullen, Michael A. 7
 Funck, Carolin 59, 60, 199, 200, 201, 203
 Füsi, Balázs 46, 142
 Gaceu, Ovidiu 41, 124
 Gajic, Aleksandra 40, 44, 115, 134
 Gál, Lajos 53, 170
 Gál, Tamás 32, 77, 78, 79
 Galluzzo, Nicola 56, 182, 184
 Gangl, Éva 69, 235
 García-Hernández, María 60, 204
 Garitan, Marta 42, 128
 Gasparovic, Slaven 35, 94
 Gaubert, Vincent 41, 123
 Gede, Mátyás 62, 211
 Geitner, Clemens 46, 142
 Geletic, Jan 32, 77
 Geronta, Chrysafina 60, 200
 Giardino, Marco 46, 141
 Gidel, Thierry 67, 229
 Ginelli (Gyimesi), Zoltán 40, 41, 42, 63, 117, 121, 126, 214, 215
 Ginisty, Karine 65, 221
 Giorda, Cristiano 40, 120
 Giostrella, Paola 53, 72, 171, 249
 Giraldez Lopez, Antonio 58, 194
 Girani, Alberto 72, 248
 GIRAUT, Frédéric 50, 157
 Giudice, Cristina 66, 224
 Givati, Reuven 32, 78
 Glorius, Birgit 34, 37, 38, 89, 104
 Goeler, Daniel 35, 91
 Gois, Sandra Lúcia Videira 71, 247
 Gomes, Eduardo Jonas 37, 103
 Gomes, Heloísa 64, 216
 Gostinčar, Petra 44, 133
 Gozzi, Andrea 56, 185
 Graffenberger, Martin 38, 107
 Gregory, Adrienne 65, 218
 Grigore, Herman 35, 96
 Grigorjeva, Undine 38, 104
 Grīne, Ineta 38, 66, 71, 104, 228, 242
 Grootens, Martiene 38, 107
 Guiza-Valverde, Frida N 58, 191, 193
 Gulan, Filip 39, 112
 Gulyás, Ágnes 32, 77, 79
 Gunko, Maria 67, 229
 Gyenizse, Péter 58, 191
 György, Farkas 48, 149
 Györgyövcis, Katalin 55, 180
 Győri, Róbert 42, 71, 125, 126, 239
 Gyuricza, György 37, 102
 Gyuricza, László 35, 97
 Gyuris, Ferenc 42, 62, 63, 127, 212
 Hágen, András 46, 141
 Hajdú, Zoltán 42, 125
 Hajto, Monika 32, 77
 Halas, Petr 53, 170
 Halleux, Jean-Marie 39, 110
 Ham, Maarten van 45, 139
 Hämäläinen, Timo 70, 238
 Hanaoka, Kazumasa 52, 165
 Harmat, Adam 39, 112
 Harpa, Gabriela Victoria 32, 77
 Hartmannová, Zuzana 66, 224
 Hatle, Jan 71, 243
 Hauke, Jan 50, 61, 159, 207
 Havadi Nagy, Xenia Kinga 56, 60, 183, 201
 Heffernan, Mike 42, 127
 Hegedűs, Gábor 35, 95
 Hegedűs, Roland 43, 129
 Helleland, Botolv 59, 197
 Herbel, Ioana 32, 77
 Hernesz, Péter 55, 179, 180
 Hesz, Roland 59, 195
 Hilander, Markus Tapani 40, 119
 Hollosi, Brigitte 32, 77
 Holvándus, Johanna 60, 61, 205, 206
 Homoki, Erika 40, 118
 Hoogerbrugge, Marloes 57, 187
 Hörschelmann, Kathrin 53, 54, 172, 174
 Hortobágyi, Borbála 39, 71, 113, 241
 Horváth, Dániel 50, 61, 158, 205
 Horváth, Erzsébet 55, 71, 178, 179, 245
 Horváth, Gergely 39, 40, 112, 115, 116, 117, 118, 119
 Horváth-Szabó, Kata 72, 248
 Hoschek, Mónika 36, 101
 Hoyler, Michael 57, 186
 Hruška, Vladan 48, 49, 152, 153
 Hrvatin, Mauro 39, 112
 Huculak, Maciej 39, 109
 Hulíková, Klára 66, 227
 Humildad, Santiago Pedraza 33, 80
 Husar, Milan 37, 102
 Iatsenko, Borys Pavlovich 50, 160
 Ilba, Mateusz 58, 192
 Ilieș, Alexandru 35, 41, 96, 123, 124
 Ilieș, Dorina Camelia 35, 41, 96, 124
 Illés, Sándor 34, 35, 89, 91, 94
 Imecs, Zoltán 45, 137
 Ira, Vladimir 42, 128
 Irimiás, Anna 35, 60, 97, 201
 Irincu, Elena 55, 56, 180, 181
 Jahnke, Holger 62, 63, 212
 Jakab, Gergely 54, 72, 176, 177, 248
 Jakiel, Michal 41, 122
 Jakobi, Akos 62, 212
 Jamaluei, Fatemeh Yadali 49, 154
 Jamecny, Lubomir 37, 102
 Jankó, Ferenc 36, 41, 101, 121, 122
 Jansons, Ilgvars 54, 173
 Jarczewski, Wojciech 39, 109
 Jaschitz, Mátyás 43, 45, 69, 131, 138, 234
 Jászberényi, Melinda 36, 98
 Jędruszkiewicz, Joanna 52, 71, 168, 247
 Jelinek, Csaba 63, 214
 Jeney, László 43, 57, 132, 186
 Jobbitt, Steven Arthur Earl 42, 126
 Jovic, Nikola 71, 246
 Johnson, Karlee 36, 100
 Jónás-Berki, Mónika 35, 92
 Jordaán, Andries 72, 247
 Jordan, Peter 56, 59, 182, 183, 195, 196, 197
 Josan, Ioana 41, 124
 Josipovič, Damir 47, 148
 Jouan-Westlund, Annie 68, 231, 232
 Józsa, Edina 44, 133, 134
 Józsa, Sándor 71, 239, 240
 Juhász, Ágoston 71, 246
 Juhász, Barbara 62, 212
 Juhász, Gyula 71, 239
 Juhász, Pál 43, 132
 Juhász-Dóra, Katalin 36, 98
 Jurchescu, Marta 46, 143
 Jusztin, Márta 60, 201
 Kádár, Anett 40, 116
 Kádár, Bálint 62, 211

Kalnina, Laimdota 71, 242
 Kamińska, Wioletta 49, 154
 Kang, Peter 59, 198
 Kara, Fatih 57, 187
 Karácsonyi, David 34, 45, 85, 138, 139, 140
 Karaman, Helin 65, 222
 Kašpar, Dan 66, 227
 Katona, Orsolya 55, 180
 Kaufman, Darrell S. 55, 179
 Kazumasa, Hanaoka 45, 139
 Kębłowski, Wojciech 65, 219
 Keceli, Arif 57, 187
 Keerberg, Anne 38, 109
 Kelemen, Kristóf 62, 211
 Kerekesne Mayer, Agnes 35, 95, 97
 Keresztely, Krisztina 65, 222
 Kertész, Ádám 54, 176
 Khazalová, Gaby 65, 219
 Khormali, Farhad 55, 178
 Kielar, Rafal 32, 77
 Kilibarda, Milan 52, 168
 Kincses, Áron 34, 35, 85, 91
 Kis, Anna 53, 169
 Kis, Éva 45, 46, 53, 71, 72, 137, 142, 171, 239, 246, 249
 Kiss, Balázs 52, 166
 Kiss, Diána Dóra 36, 98
 Kiss, Éva 38, 39, 109, 110
 Kiss, Klaudia 71, 72, 239, 240, 248
 Kiss, Márton 32, 39, 79, 113
 Kiss, Miklós 39, 113
 Kiss, Tímea 55, 179, 180
 Kiss, Veronika 69, 236
 Kitada, Eri 50, 156
 Kladivo, Petr 32, 78
 Klein, Richard J.T. 36, 100
 Klemešová, Kamila 52, 166
 Köbli, Ádám 35, 92
 Kocsis, János Balázs 61, 206
 Kocsis, Károly 47, 146, 147, 148
 Kocziszký, György 38, 108
 Koeniger, P. 55, 179
 Kofman, Eleonore 7, 29
 Kok, Herman 64, 216, 217
 Koldobskaya, Natalia A. 69, 236
 Komjáthy, Dénes 52, 166
 Konecka-Szydłowska, Barbara 50, 71, 159, 246
 Konyshev, Valery 67, 228
 Kopacz-Wyrwał, Iwona 49, 154
 Kopczewska, Katarzyna 61, 207
 Kóródi, Tibor 35, 91
 Koroma, Nataliya Stepanivna 45, 139
 Korompai, Attila 43, 132
 Kósik, István 53, 170
 Kossowski, Tomasz 47, 61, 145, 207
 Kostelecký, Tomáš 48, 151
 Kőszegi, Margit 44, 45, 136, 137
 Kovacs, Andras Donat 71, 241, 243
 Kovács, András 64, 217
 Kovács, Gyöngyi 35, 95, 97
 Kovács, Ildikó 60, 202
 Kovács, Ildikó Éva 40, 119
 Kovács, János 55, 178
 Kovács, József 51, 71, 162, 245
 Kovacs, Tamas 52, 167
 Kovacs, Zoltan 50, 61, 158, 205
 Kóvári, István 35, 96
 Kozma, Gábor 41, 123
 Kołós, Arkadiusz 50, 160

Krisjane, Zaiga 35, 66, 91, 227, 228
 Krūze, Imants 56, 183
 Kruzmetra, Zenija 38, 105
 Kucerova, Silvie Rita 71, 243
 Kucsicsa, Gheorghe 46, 143
 Kukimoto, Mikoto Fujita 71, 241
 Kulcsár, Noémi 35, 93
 Kulczyńska, Katarzyna 50, 71, 159, 246
 Kűsová, Tereza 60, 203
 Kuttor, Dániel 47, 145
 La Rocca, Rosa Anna 58, 190
 Labianca, Marilena 55, 56, 180, 181
 Ladányi, Zsuzsanna 36, 99
 Lados, Gábor 35, 95
 Laine, Jussi 33, 34, 83, 84, 86, 87
 Lakatos, Monika 52, 167
 Lana, Maurizio 62, 211
 Lang, Thilo 38, 106, 108
 Lapayese, Concepcion 34, 85
 Lapayese, Manuel Gazapo 34, 85
 Latinovic, Magdalena 53, 171
 Lazzeri, Riccardo 46, 141
 Le Bel, Pierre-Mathieu 68, 232
 Leelösy, Ádám 71, 244
 Leetmaa, Kadri 45, 60, 61, 139, 205
 Lefebvre, Félix 65, 221
 Lehnert, Michal 32, 77, 78
 Lehotská, Blanka 71, 239
 Lehotský, Roman 71, 239
 Leick, Birgit 37, 38, 49, 104, 153
 Lendvay, Márton 54, 173
 Lennert, József 35, 89
 Léphaft, Áron 48, 151
 Leščešen, Igor Ivan 72, 247
 Leto, Alessandro 70, 237
 Levi, Eldad 32, 78
 Liikanen, Ilkka 34, 85
 Lincoln, Robyn Adele 65, 218
 Liro, Justyna 60, 61, 202, 208
 Liro, Maciej 44, 133, 134
 Liubimau, Siarhei 34, 86
 Lo Presti, Laura 33, 80
 Lóczy, Dénes 53, 72, 170, 171, 249
 Loewen, Bradley 31, 75
 Lorber, Lucka 43, 129
 Lőrincz, Katalin 43, 132
 Loy, Anna 53, 172
 Lukić, Tin 72, 247
 Lukovic, Jelena 52, 54, 168, 177
 Lupșan, Mihai 51, 162
 M. Császár, Zsuzsanna 43, 129
 Machala, Branislav 63, 214
 Máčka, Zdeněk 53, 170
 Madarász, Balázs 54, 72, 176, 248
 Madonia, Emanuele 47, 144
 Mägi, Kadi 45, 139
 Magyar, Norbert 71, 245
 Makádi, Mariann 40, 116, 117, 118
 Malatesta, Stefano 36, 100
 Mamadouh, Virginie 47, 147
 Manojlovic, Predrag 54, 177
 Maracz, Laszlo Karoly 47, 146
 Marengo, Marina 68, 231
 Margarint, Mihai Ciprian 46, 141
 Margier, Antonin 64, 65, 218, 220, 221
 Mari, László 44, 45, 51, 136, 137, 162
 Marie, Pascal 68, 231
 Marina, Marengo 68, 231

- Marincioni, Fausto 36, 99, 101
 Markó, András 71, 240
 Markovic, Vladimir 71, 240
 Maroşi, Zoltan 56, 183
 Maroto, Juan Carlos 56, 182
 Martyn, Zita 60, 202
 Marzano, Flavia 57, 58, 188, 190, 191, 193
 Máthé, Csongor 43, 60, 132, 199
 Mathe, Virag 69, 237
 Matlovic, Rene 42, 43, 128, 130
 Matlovicova, Kvetoslava 43, 130
 Matousek, Roman 61, 63, 207, 214
 McCoy, William D. 55, 179
 Męczyński, Michał 61, 208
 Medeiros, Eduardo 31, 75
 Meding, Jason von 36, 100
 Medved'ova, Alzbeta 71, 240
 Megyeri, Máté 71, 240
 Meijers, Evert J. 57, 187
 Meini, Monica 60, 200
 Meißl, Gertraud 46, 142
 Meleg, Dániel 39, 112
 Melillo, Massimo 53, 72, 171, 249
 Mena, Carlos Gerardo 50, 158
 Merciu, Florentina Cristina 71, 244
 Merciu, George 71, 244
 Merics, Attila 71, 244
 Mészáros, Aranka 40, 119
 Mészáros, Erzsébet 54, 176
 Meusburger, Peter 7, 30
 Meyer, Ralf P. 69, 235
 Mezentsev, Kostyantyn 34, 85
 Mezösi, Gábor 40, 116
 Mezzapelle, Daniele 58, 193
 Miani, Franca 58, 189, 191
 Michalkó, Gábor 34, 35, 36, 60, 89, 93, 98, 201, 203
 Micu, Dana 46, 143
 Micu, Mihai Alexandru 46, 141, 142, 143
 Miggelbrink, Judith 53, 54, 172
 Mignolli, Nadia 58, 190
 Mihaela, Popescu 46, 142
 Mihály, Melinda 38, 108
 Mika, János 39, 53, 113, 170
 Mikešová, Renata 48, 151
 Miklós, László 39, 114
 Miljković, Đurđa 72, 247
 Milošević, Dragan D 32, 78, 79
 Milosevic, Marko 54, 177
 Mirloup, Aurore 68, 232
 Misseri, Veronique 67, 229
 Moldovan, Aura 54, 173
 Moldovan, Ciprian 39, 110
 Molnár, Ernő 49, 155, 156
 Molnar, Gergely 71, 245
 Molnár, Mihály 71, 240
 Molnár, Tamás 43, 133
 Molnar Sansum, Judit 54, 174
 Mona, Tamás 71, 244
 Montanari, Armando 35, 90, 91, 95
 Montesinos i Ciuró, Eduard 49, 156
 Mueller, Daniel 44, 135
 Mulicek, Ondrej 63, 215
 Müller, Dieter K 59, 60, 199, 201, 202, 203
 Mundula, Luigi 57, 58, 188, 190, 191, 193
 Munkácsy, Béla 39, 40, 112, 115
 Murányi, Zoltán 39, 113
 Murao, Osamu 45, 140
 Musco, Francesco 43, 130
 Mustafaç, Sanja Enes 54, 177
 Muto, Francesco 62, 210
 Mydlova, Anna 52, 165
 Nadler, Robert 35, 93
 Nafaa, Nora 63, 213
 Nagy, Adrienne 36, 98
 Nagy, Balázs 44, 51, 135, 136, 162
 Nagy, Erika 49, 66, 155, 225, 226
 Nagy, Eva 35, 97
 Nagy, Gabor 38, 66, 107, 226
 Nagy, Gyula 52, 164
 Nagy, Judit T. 35, 93
 Nagy, Julia 69, 236
 Nagy, Zoltán 57, 188
 Napolitano, Elisabetta 53, 72, 171, 249
 Navarro, Francisco Antonio 55, 56, 180, 182
 Nemerkenyi, Zsombor 62, 210, 211
 Nemes, Gusztáv 43, 56, 132, 181
 Nemeskéri, Gyula 40, 119
 Németh, Ádám 47, 146
 Nemeth, Csilla Peline 53, 169
 Németh, Nikolett 36, 101
 Németh, Tibor 72, 248
 Nemkova, Alina 45, 138
 Nezdei, Csilla 56, 182, 183
 Nicolaï, Henri 42, 127
 Niculita, Mihai 46, 141
 Nikischer, Richard 50, 159
 Nikodemus, Olgerts 56, 183
 Nikolić, Teodora 37, 103
 Nosek, Stepan 31, 73
 Novothny, Ágnes 55, 178, 179
 Novotna, Katerina 71, 243
 Novotny, Gustav 45, 140
 Nozeman, Eduard Francois 64, 216, 217
 Nyerges, Enikő 69, 235
 Nyeste, Andras 59, 195
 Oana-Ramona, Ilovan 60, 201
 Oches, Eric A. 55, 179
 Ocskay, Gyula 31, 34, 69, 73, 86, 234
 Oedl-Wieser, Theresia 56, 181
 Onaca, Alexandru Lucian 46, 51, 71, 142, 162, 163, 242
 Ongaro, Luca 59, 198
 Örbring, David 40, 119
 Ortiz, Anna 54, 174
 Ottens, Henk 6, 70, 238
 Pachura, Piotr 39, 42, 43, 110, 111, 128, 129
 Pál, Viktor 52, 164
 Palaczki, Botond 35, 93
 Palagiano, Cosimo 59, 195, 196, 197
 Paliaga, Guido 72, 248
 Pálinkás, Melinda 54, 176
 Pap, Norbert 50, 51, 159, 160
 Papp, Júlia 35, 92
 Papp, Lelia 33, 81
 Pappne Vancso, Judit 36, 101
 Pastor Saberí, Roser 34, 86
 Pásztor, László 33, 82
 Pásztor, Zoltán István 47, 148
 Patkós, Csaba 38, 39, 108, 113
 Paunescu, Vlad 71, 244
 Pazzola, Giangavino 33, 81
 Peiry, Jean-Luc 39, 71, 113, 241
 Peneze, Zanda 56, 182, 183
 Péntes, János 47, 148
 Perfetti, Yuri 62, 209
 Perger, Éva 71, 241
 Perko, Drago 39, 112

- Perucca, Giovanni 67, 229
 Pete, Márton 34, 87
 Péter, Dóra 69, 237
 Péter, Rózsa 45, 137
 Péti, Márton 43, 130, 131
 Petrea, Rodica 56, 181
 Petrikova, Dagmar 49, 155
 Petrovici, Norbert 39, 63, 110, 215
 Petru, Urdea 46, 51, 71, 142, 162, 163, 242
 Petrvalská, Alena 45, 137
 Petsimeris, Petros 58, 192
 Pettenati, Giacomo 40, 120
 Petykó, Csilla 36, 98
 Picasso, Roberto 72, 249
 Pieczka, Ildiko 52, 72, 168, 248
 Pigliucci, Michele 56, 185
 Pilo, Francesca 65, 219
 Pirisi, Gábor 38, 105
 Pisano, Luca 71, 244
 Piticar, Adrian 52, 167
 Plutino, Antonina 56, 182
 Pődör, Andrea 62, 210
 Poesen, Jean 6, 28
 Poli, Raffaella 41, 124
 Pollice, Fabio 46, 47, 143, 145
 Pongrácz, Rita 32, 52, 53, 71, 72, 76, 168, 169, 245, 248
 Popescu, Mihaela 51, 163
 Popovici, Ana 46, 143
 Pósfai, Zsuzsanna 54, 63, 174, 214, 215
 Prácsér, Ernő 46, 142
 Prats, Maria 54, 174
 Prince, Solene 60, 203
 Prochazka, Jan 55, 56, 180, 182
 Prochazkova, Alena 43, 130
 Prodán, Tímea 46, 53, 72, 142, 171, 249
 Protic, Branko 40, 115
 Proto, Matteo 42, 66, 125, 224
 Prunesti, Alessandro 58, 192
 Pyyry, Noora 65, 222
 Raagmaa, Garri 38, 109
 Radics, Kornélia 52, 53, 167, 169
 Raffay, Agnes 43, 132
 Raghoobar, Hein 59, 195
 Raluca, Buhas 35, 96
 Raper, Peter Edmund 59, 196
 Raso, Emanuele 46, 141
 Rastislav, Cákoci 58, 191
 Rátz, Tamara 35, 60, 96, 203
 Raularian, Rusu 39, 110
 Ravenel, Loïc 41, 124
 Rázsi, András 53, 170
 Reid, Neil 38, 39, 109, 111
 Reményi, Péter 51, 160
 Remenyik, Bulcsú 35, 96
 Révész, András 62, 210
 Reyes Nunez, José Jesús 62, 210, 212
 Reynaud, Caroline 65, 220
 Rezende, Jeferson Hugo Pacheco de 64, 216
 Ricci, Alessandro 65, 66, 223, 224
 Riitano, Mariagiovanna 47, 146
 Ringer, Marianna 72, 249
 Rizzo, Luca Simone 39, 114
 Rizzo, Raffaella Gabriella 39, 114
 Rocha, Jorge 37, 102, 103
 Rodó-de-Zárate, Maria 54, 174
 Rogerson, Christian M. 39, 111
 Ronconi, Maria Luisa 62, 209
 Rosol, Michal 37, 104
 Roskopf, Carmen M. 53, 71, 172, 244
 Rostami, Shahbakhti 44, 62, 135, 210
 Rostinsky, Pavel 71, 240
 Ruffolo, Alessandro 56, 62, 185, 210
 Rupnik, László 44, 135, 136
 Rus, Ionuț 32, 77
 Rusz, Ottilia 71, 239
 Rutzinger, Martin 46, 142
 Saaroni, Hadas 32, 78
 Sabbadini, Linda Laura 57, 188
 Sadoń-Osowiecka, Teresa 40, 116
 Saffari, Jahanbakhsh 49, 154
 Sakulski, Dušan 72, 247
 Salamin, Géza 43, 130, 131
 Salento, Angelo 56, 181
 Salone, Carlo 33, 81
 Salustri, Andrea 58, 190
 Sánchez-Aguilera, Dolores 58, 60, 190, 192, 204
 Santamaria, Frédéric 31, 73
 Santangelo, Michele 53, 171
 Santasusagna Riu, Albert 61, 209
 Santis, Roberta De 58, 190
 Sărășan, Adriana 44, 134
 Sargsyan, Tigran 45, 138
 Saura-Mas, Sandra 71, 243
 Savic, Stevan 32, 71, 76, 79, 240
 Schiller, Daniel 49, 155
 Schipper, L. 36, 100
 Schmitt, Peter 31, 73, 74
 Schweitzer, Ferenc 53, 72, 171, 249
 Scorpio, Vittoria 53, 71, 172, 244
 Scott, James W 34, 65, 69, 87, 222, 234
 Scrofani, Luigi 47, 146
 Seijmonsbergen, Arie Christoffel 46, 142
 Șerban, Raul David 46, 51, 142, 163
 Sergunin, Alexander 67, 228
 Shatilo, Daria 47, 147
 Sichinava, David 48, 151
 Sifta, Miroslav 71, 243
 Signorini, M. Adele 59, 198
 Sik, András 33, 82
 Sikos, Tamás T. 64, 217
 Silva, Marcia da 71, 241
 Simi, Gianluca 34, 87
 Simon, István 71, 239
 Šimon, Martin 48, 150, 151
 Simonyi, Peter 69, 70, 236, 237
 Sipos, György 36, 55, 99, 179, 180
 Sipos, Péter 72, 248
 Siskáné, Beáta Szilasi 35, 91
 Šitera, Daniel 63, 215
 Siti, Maria 58, 191
 Siwek, Tadeusz 66, 224
 Skarbit, Nóra 32, 77, 79
 Šķilters, Jurgis 37, 104
 Smerghetto, Filippo 39, 114
 Smigiel, Christian 57, 58, 188, 193
 Soldati, Mauro 46, 141
 Solem, Michael 40, 70, 119, 238
 Soljan, Izabela 60, 61, 202, 208
 Spaans, Marjolein 36, 101
 Spacek, Martin 38, 109
 Spadavecchia, Camilla 35, 91
 Spilková, Jana 52, 165
 Spire, Amandine 65, 221
 Sproge, Iveta 35, 94
 Standovár, Tibor 62, 211
 Staniscia, Barbara 35, 92, 95

- Stastny, Pavel 32, 77
 Steiger, Johannes 39, 71, 113, 241
 Strautnieks, Ivars 71, 242
 Stryjakiewicz, Tadeusz 38, 105
 Süli-Zakar, István 35, 90
 Sulyok, Judit 35, 96
 Sunna, Claudia 47, 146
 Sütő, László 40, 45, 118, 137
 Svane, Baiba 35, 90
 Svec, Marek 32, 77
 Svensson, Sara 31, 74
 Sykora, Ludek 61, 63, 205, 207, 215
 Szabó, Balázs 48, 150, 151
 Szabó, Bernadett 71, 239
 Szabó, Boglárka 54, 176, 177
 Szabó, Géza 35, 92, 97
 Szabó, Judit Alexandra 54, 177
 Szabó, Judit 54, 176, 177
 Szabó, Katinka 35, 97
 Szabó, Mária 39, 40, 112, 115
 Szabó, Péter 52, 169
 Szakmány, György 71, 240
 Szalai, Sándor 52, 167
 Szalai, Zoltán 39, 40, 46, 51, 54, 55, 71, 72, 112, 113, 115, 142, 162, 176, 177, 178, 239, 246, 248
 Szalók, Csilla 35, 96
 Szatmári, József 36, 39, 99, 114
 Szczegielniak, Michał 48, 152
 Seberényi, József 45, 46, 53, 71, 72, 137, 142, 171, 239, 240, 246, 249
 Szendi, Dóra 38, 108
 Szentimrey, Tamás 52, 167
 Szentpáli, Áron 50, 66, 159, 224
 Szepszo, Gabriella 52, 169
 Szilassi, Péter 36, 99
 Szkordilis, Flóra 32, 79
 Szmánda, Jacek 71, 240
 Szuhoa, Jana 49, 155
 Tabusi, Massimiliano 70, 238
 Taczanowski, Jakub 50, 160
 Tagai, Gergely 54, 175
 Takács, Katalin 33, 82
 Talabos, Istvan 35, 97
 Tamás, László 39, 40, 112, 115
 Tambassi, Timothy 62, 211
 Tammaru, Tiit 45, 139
 Tani, Sirpa 65, 222
 Tátrai, Patrik 47, 66, 146, 148, 225
 Telbisz, Tamás 44, 45, 136, 137
 Telle, Stefan 31, 74
 Tenedório, José António 37, 102
 Teperics, Károly 43, 129
 Teufel, Nicolai 34, 88
 Thiel, Christine 55, 179
 Thomalla, F. 36, 100
 Tickle, Sarah 65, 220
 Timár, Judit 7, 30, 53, 172
 Timothy, Dallen J. 34, 35, 89, 93
 Tiner, Tibor 43, 132
 Tiran, Jernej 48, 52, 150, 164
 Tobak, Zsolt 39, 114
 Todorčić, Jovana 61, 206
 Tolmaci, Ladislav 52, 58, 165, 191
 Tolnai, Gábor 61, 206
 Tömöri, Mihály 35, 90
 Torok, Gergely József 39, 110
 Torok, Ibolya 54, 175
 Tort Donada, Joan 59, 61, 197, 209
 Toseroni, Fulvio 36, 101
 Tóth, Adrienn 54, 55, 176, 178
 Tóth, Csaba Albert 71, 244
 Tóth, Géza 57, 188
 Trangos, Guy Jano 50, 158
 Trócsányi, András 38, 105
 Trombitas, Timea 47, 148
 Tulaková, Katarína 32, 80
 Ujházy, Noémi 41, 122
 Újvári, Gábor 55, 178, 179
 Unger, János 31, 32, 76, 77, 78, 79
 Ungureanu, Mihaela 41, 124
 Utasi, Zoltán 39, 113
 Uzzoli, Annamaria 45, 138
 Vágner, Jiří 60, 203, 204
 van Leeuwen, Bart 65, 220
 van Leeuwen, Boudewijn 39, 115
 Vandermeer, Marie-Caroline 39, 110
 Vandermosten, Christian 42, 48, 49, 127, 150, 155
 Varga, Ágnes 43, 132
 Varga, György 55, 71, 178, 239, 240
 Vasáros, Gábor László 61, 206
 Vass, Róbert 55, 180
 Vassi, Avgi 58, 191
 Vaszko, Csaba 36, 70, 102, 237
 Vautier, Franck 39, 71, 113, 241
 Vedrédi, Katalin 65, 223
 Végh, Andor 48, 151
 Végh, Tamás 71, 245
 Velkey, Gábor Dániel 54, 175
 Venier, Ivana 34, 88
 Vicente, Joan 67, 230
 Vicente, Michael 67, 229
 Viczián, István 44, 45, 46, 53, 71, 72, 135, 137, 142, 171, 239, 246, 249
 Vida, György 48, 151
 Vignani, Donatella 57, 188
 Viktor, Jambor 65, 223
 Villa, Anna 58, 190
 Violante, Antonio Giuseppe 51, 161
 Virág, Tünde 65, 222
 Visi, Judit 40, 118
 Vitale, Alessandro 59, 195
 Vlaicu, Mihai 41, 124
 Vleschauwer, Adeline De 64, 216
 Vögtle, Eva 42, 128
 Voiculescu, Mircea 51, 162, 163
 Vorotnikova, Tatiana 45, 140
 Vuk, Ružica 59, 196
 Vukelic, Tatjana 51, 161
 Vulturius, G. 36, 100
 Vysoudil, Miroslav 32, 77, 78
 Wakabayashi, Yoshiki 52, 71, 164, 241
 Walawender, Jakub 32, 77
 Wardenga, Ute 42, 126
 Waszak, Marcin 48, 152
 Waterhout, Bas 36, 101
 Wayens, Benjamin 64, 216
 Wendt, Jan 41, 123
 Wibig, Joanna 52, 168
 Wilson, Andrew 36, 53, 71, 99, 170, 246
 Winkler, Andreas 35, 91
 Withers, Charles 42, 125, 126
 Wusching, Tamás Á. 43, 129
 Wusten, Herman van der 6, 28
 Włoskiewicz, Wojciech 59, 197
 YAMAN, Fatih 51, 161
 Yubero Bernabé, Claudia 60, 204

Yui, Yoshimichi 35, 71, 94, 241
Yuldasheva, Indira 44, 135
Zahorcsák, Zsolt 47, 145
Zátori, Anita 35, 93
Zentai, László 62, 210, 211, 212
Zieher, Thomas 46, 142
Zieliński, Mariusz 71, 247
Zimmermann, Pavel 66, 227
Ziv, Baruch 32, 78
Zorko, Marta 34, 88
Zorzato, Samara Videira 71, 247
Zsámbok, István 37, 102
Zsilinszki, Anna 71, 245
Zumpano, Veronica 46, 71, 143, 244
Zuvela-Aloise, Maja 32, 77

KEYWORDS

- (de)constructing 85
- (de)territorialization 80, 225
- 2d resistivity 142
- 3D diachronic survey 113
- 100 resilient cities 101
- AAR 179
- accessability 94
- accumulation 180
- actor-network theory 166, 216
- adaptation 99, 100, 101, 209
- administrative-territorial autonomy 106
- aeolian dust 178
- aeolian loess 141, 178
- aeolian sand 180
- aerial photo 81
- aerial photographs 113
- aerial survey 114
- Africa 84, 221
- Aggelek 137
- aggregation of parishes 241
- agricultural land-use 183
- agriculture 101, 155
- air-pollution 113
- algorithm 79
- alluvial sequence 171
- alternative energy 98
- American Empire 127
- American Geographical Society 127
- anthropic lakes 141
- anthropocene 210
- antropic 82
- antropogenic landscape forming 137, 141, 171, 187, 247
- applied research 167
- approche géo-littéraire 231
- appropriation 158
- Apuseni Mts 137
- archaeological sites 136, 137
- architecture 86
- archive 81
- Arctic Oscillation 245
- armed conflict 85
- art practices 80, 81
- arts 80
- assemblage theory 111, 173
- assimilation 80, 148, 149
- atmospheric urban heat island detection 77
- attitude 92
- attractiveness of urban settlements 186
- Austria 149
- automobility 93
- Balkans 162
- Baltic Sea Basin 168
- bank erosion 171
- Baranya County 97
- Basilicata 185
- beer consumption 111
- Begato 9 172
- behaviours 103
- Belarus 138
- Belgium 110, 127
- Belgrade 206, 246
- bias correction 169
- big data 124, 157, 190, 212
- bioenergy 102
- black blocs 158
- block streams 163
- blue collar jobs 110
- border 80, 83, 84, 86, 87, 88, 194, 235, 246
- border communities 88
- bordering 83, 88, 194, 222
- borderlands studies 87, 195, 235
- borderline civilization 140
- border residents 228
- borders 86, 87, 88, 93, 161, 234
- borderscape 80, 85, 225
- Bosnia and Herzegovina 148, 160, 161
- bottom-up strategies 172
- Bratislava 214
- brewing industry 111
- Brigetio 135
- Bronze Age 240
- brownfields 216
- Brussels 84
- Budapest 97, 98, 102, 157, 158, 187, 211, 214
- buffer zone 122
- built heritage 201, 233
- Burda Hills 239
- Calabria 210
- Campania 146
- capital flows 225
- capitals 235, 236
- carbon redistribution 176
- car culture 93
- carpatclim data 169
- Carpathian Basin 147, 245
- Carpathian region 169
- cartograms 212
- cartographic silence 225
- cartography 212, 243
- Catalogne 174, 230, 234
- Catalonia 156
- catchment area 132
- caves 239
- centralization 215
- change points 239
- channel adjustments 172
- channel recovery 172
- chile 162
- choronyms 197
- circulation 91, 173
- city 131
- City of Zagreb 94
- civilising mission 127
- civil society 88
- civil war 161
- class struggles 215
- climate change 77, 78, 99, 100, 101, 102, 132, 138, 162, 167, 168, 170, 178, 179, 209, 240, 249
- climate change adaptation 101
- climate conscious urban design 79
- climate index 169
- Cluj-Napoca 77
- Cluj-Napoca City 81
- clusters 110
- co-creation 194
- coastal areas 83, 220
- cohesion 234
- cohesion policy 131
- Cold War 126
- cold war science policy 185
- collective memory 218
- collective quality of life 166
- colonialism 125, 127
- commemoration 156, 157, 159
- commercial gentrification 111, 208
- community 155, 173, 185, 186
- community-led local development 83, 182
- comparative methodologies 212
- complexity 114
- complex systems 103, 189
- components 103
- consumption 216
- conflicts 84, 206, 220
- conservation tillage 176
- constellation 243
- consumption 216, 217, 236
- content analysis 202
- convergence 159
- cooperation 242
- counterurbanisation 89
- creative cities 128, 189, 208
- creative industries 111, 128, 208
- creative sector 208
- creative tourism 111
- creativity 98, 246
- crisis 91, 99, 143, 173, 174, 193, 228
- criteria 196
- criteria of sd 237
- critical political economy 185, 215
- critical theory 214
- Croatia 88, 196
- cross-border cooperation 73, 74, 83, 84, 86, 88, 93, 131, 195, 228, 234
- cross-border datasets 234
- cross-border health care 235
- cross-border planning 86, 131, 234, 235
- crown density 141
- cultural 158
- cultural capital 81
- cultural environment 91, 105, 157, 191, 231, 244
- cultural geography 93
- cultural heritage 158, 200, 204, 209
- cultural rural heritage 97
- cultural tourism 199, 201, 202, 204
- culture 81
- curriculum 118
- cyberspace 85
- Czech cities 80, 214
- Czech Republic 130, 151, 160, 166
- daily precipitation 169
- Danube 82, 137, 142, 239, 246
- Dayton Agreement 161

- debt 174
 deconcentration 215
 demographic changes 105, 227
 Demographic density 144
 demography 139
 Dendrogeomorphology 162
 denudation rates 242
 dependency 107
 Deperipheralisation 106
 depopulation 105, 137, 148
 Đerdap National Park 115
 development 100, 121, 145, 146, 230, 235
 development integrated 182
 development policy 131
 dialectical and historical materialism 136
 differentiation 134
 digital soil mapping 82
 digitization 81
 digitizing error 133
 disability 193
 disaster life cycle 140
 disaster mitigation 140
 disaster risk reduction 101
 distance 187, 191
 divergence 145
 diversity 146, 158, 170
 downtown 223
 DPA 160
 drawing 119
 drought 115, 209
 dune morphometry 180
 dwelling zone 207
 dynamics 130, 134, 177
 early warning 115
 Earth hummocks 163
 Earth observation 82, 187
 earthquake 154
 East-Central European poor strata 90
 East and Central Europe 109, 139, 145, 160, 226
 East Central Europe 145
 eastern block 136
 Eastern Europe 215
 Eastern Serbia 134
 eating 225
 eco lodge 97
 ecology 170, 211, 236
 economical conditions and communal services 113
 economic crisis 91, 145, 155, 175
 economiccrisis 145
 Economic damage 244
 economic development 110, 131, 145
 economic education 119
 economic geography 126
 economic geography of location 110
 economic inequalities 132, 143, 144, 148, 174, 184, 185, 190, 229
 economic space 111, 186
 economy 123, 152, 153, 185, 229
 ecosystem 229
 ecosystem services 102, 113, 237
 education 132
 educational attainment of population 154
 educational policy 213
 educational transformation 116
 educational travel 203
 education language 148
 efficiency 132
 EGTC 73, 74
 elderness 193
 electoral behaviour 149, 150, 151, 152
 electoral geography 150, 151, 152
 embeddedness 109
 emergency threshold index 101
 empirical methodology 91
 employability 215
 energy transition 106, 112
 engineering 120, 170, 229, 246
 enlargement 145, 184, 185, 186
 entrepreneurship 143, 152, 202
 envi-met 79
 environment 114
 environmental change 121, 122, 236
 environmental controversy 121, 122
 environmental hazard 78, 130, 166, 209
 environmental implications 114
 environmental monitoring 102, 114
 environment 118
 ERT 242
 essential needs 237
 Estonia 139
 ethics 84, 87, 220
 ethnic conflict 89, 158, 159, 161, 194, 224
 ethnic enclave 207
 ethnic identity 148, 149, 224
 ethnicity 140, 146, 147, 148, 161
 ethnic mobilization 151
 ethnic realignment 148
 ethnic segregation 139, 148, 222
 ethnic structure of Brest and Gomel regions 138
 ethnomethodology 166
 ethnopolitics 151, 160
 ethnoterritorial structures 160
 ethnography 166
 EU Cohesion Policy 73, 74, 75, 83, 145, 146, 153, 195, 235
 EU policies 131, 160, 185
 eurobarometer 159
 Eurocentrism 117
 Europe 105, 146, 184, 185, 186, 194, 195, 227, 237
 European Cultural Route 84, 199
 Europeanization 86
 European neighbourhood 85
 European Union 84, 95, 104, 194
 EU support payments 183
 EU territorial agenda 131
 evaluation 115, 181, 191
 everyday practices 173
 everyday social practices 88
 everyman's right 222
 exclusion 222
 exonyms 196, 197
 experience 80, 93, 201
 experiment 118, 244
 extreme precipitation events 168
 extreme wind 169
 eye tracking study 117
 FADN 184
 fashion 216
 fentrol.hu 81
 field survey 91, 114, 200
 financial awareness 119
 financial crisis 145, 185
 financial flows 90
 financial literacy of the youth 119
 financial literary 119
 financial programmes 154
 firm 107, 109, 110
 first world war 125
 flash floods 248, 249
 flatness 135
 flickr 211
 floodplain 102
 flood risk 170, 246
 floods 99, 166, 170, 171, 247
 flood zones 170, 246
 flume 244
 fluvial development 180
 fluvial terrace 136, 240
 fluviokarst 133
 folk tale 232
 food and energy nexus 237
 food consumption 165, 237
 food security 165, 237
 football 124
 foreign policy 162
 forestry 211
 forest vegetation 198
 fragmented government 215
 France 231, 241
 functional cross-border regions 73
 functional transformation 216
 future trend 169
 fuzzy responsibility 102
 gastronomy 97
 gender 91, 93, 121, 174, 193
 gender balance 208
 gender differences 94
 genetic algorithm 113
 Genoa 172, 248
 gentrification 205
 geo-hydrological hazard 248
 geo-hydrological risk 171, 209, 249
 geotification error 133
 geoethics 210
 geograpal education 118
 geographical education 116, 118, 198, 212
 geographical epistemology 73, 80, 87, 126
 geographical misconceptions 116
 geographical research 131, 173
 geographical societies 125, 127
 geographies of education 212
 geography 120, 123, 154, 167, 211, 232
 geography and war 126, 127
 geography education 117, 118, 119, 120, 196, 197, 243
 geography textbook 117, 243
 geomorpgy 239
 geomorphological map 142
 geomorphological hazards 142, 163, 247
 geomorphological mapping 133
 geomorphology 137, 170
 geomorphometry 134, 136, 245
 geomorphons 135
 geophysical investigations 163
 geopolitic 84, 93, 155, 184, 185, 186, 194

- geopolitics 83
 geospatial 81
 geostatistics 82, 117
 geosystem 114
 Germany 88, 91, 94, 200, 235, 241
 GIN index 96
 GIS 76, 82, 112, 133, 136, 164, 191, 210
 GIS mapping 77, 82, 102, 133, 135, 187, 198, 211, 235
 GIS technology 115, 134
 glaciolimnic 242
 glaciotectionics 242
 global climate change 141, 236
 global history 117
 globalization 74, 140, 143, 147, 157, 184, 186, 203
 global production networks 156
 governance 75, 99, 100, 181, 193, 220
 GPR 180, 242
 granulometric parameters 249
 grasshoppers program 79
 grass strip 176
 gravel-bed river 170
 gravels 239, 240
 Greece 191
 green areas 121
 green hotels 98
 ground-penetrating radar 142
 growth coalitions 216
 guest card 92
 gully 134
 gypsies 149
 György Markos 126
 happiness 165
 hazard 143
 health care 164
 health risk behavior 165
 heavy rainfall 171, 249
 herbs 183
 high bluff 142, 246
 high coast 141, 240
 higher education 95, 128, 129, 130, 244
 highly skilled migrants 95
 high school population 94
 high skilled migration 129
 high speed train 230
 historicity 86
 homelessness 220, 223
 hotel competitiveness 97, 98
 hotspots 112
 household 173
 housing 154, 174, 191, 205, 214, 226
 Hron 240
 human rights 140, 156, 221
 Hungarian and Croatian community in Serbia 151
 Hungarian Geographical Society 126
 Hungarian settlement network 206
 Hungary 75, 91, 93, 95, 98, 113, 122, 126, 127, 129, 132, 142, 151, 160, 171, 173, 174, 203, 212, 226, 241, 246
 hybridity 148
 hydrogeomorphic processes 241
 ICT and city future 189
 identity 85, 140, 158
 imaginaires ruraux 198, 200, 232, 233, 234
 immigrants 84, 149
 impact of companies 188
 incision 180
 inclusion 193
 indigenous languages 196
 industrial change 110, 111
 industrial enterprise 153
 industrial relocation 110
 industrial zone 110, 207
 industry 110
 inequalities 121, 155, 236
 inequality 164
 Information 90
 information technology 164
 inland excess water 99
 inner city 206
 innovation 82, 107, 111, 128, 129, 144, 153, 193, 229, 237, 243
 innovative tourism product development 92, 200
 Insolation 192
 institutional and technological co-evolution 109
 integrated spatial planning 73
 integration 100
 interactions 103
 internal structure 163, 242
 international migration 90, 91, 173
 international trade 155
 internet of things 192
 interviews 139, 164
 intra-urban comparisons 191, 240
 invasive species 102
 investigation 118
 invisible tourism 203
 islands 137
 Italy 125, 189, 192, 198
 ITI 73
 Japan 94, 165, 200
 jet stream 245
 Jewish quarter of Budapest 208
 junction geopolitical region 139, 160
 karst 124, 133, 137
 karst phenomena 124
 karst plateau 124
 karst systems 124
 knowledge-based economy 129, 215
 knowledge economy 144, 246
 knowledge production 81, 90, 116, 121, 126, 128, 129, 130, 143
 Kontinentalna Hrvatska 154
 Krakow 208
 Kulcs 142
 Kyiv 151
 labour market 93, 104, 208, 241
 Lake Balaton 96, 246
 Lake Balaton recreational area 183
 landform classification 133
 landscape 80, 115, 200
 landscape change 114
 landscape conflicts 115
 landscape diversity 112
 landscape load 115
 landscape modelling 116, 138
 landscape planning 86, 138, 209
 landscapes 82, 84, 86, 112, 116, 122, 158, 171, 179, 200, 201, 231, 232, 233, 243
 landslide 141, 143, 244
 landslide pattern 141
 landslides 142
 landslip 247
 landslide 142
 land use 170, 177, 183, 202, 209, 246
 land use optimization 113
 laser scanning 244
 Latin America 140
 Latvia 91, 183, 198, 228
 leader 108, 181, 182
 leadership 107, 109, 242
 learning devices 88
 level of economic development 110, 154
 Lidar 133, 141
 life satisfaction 191, 193
 linguistic landscape 196, 197
 linguistictreaction 196
 literature 211, 232
 littérature populaire 231
 living labs 194
 Lleida 209
 local climate zone 240
 local climate zones 77, 78
 local consciousness 73
 local development 112, 133, 146, 153, 170, 181, 246
 local food 155, 165, 225, 237
 local governance 99, 108, 144, 153, 182, 183, 220, 230, 236
 local identity 201, 233
 local people 92
 local strategies 156
 local to global 229
 location 218
 loess 178, 240, 245
 loess-paleosol serie 249
 logistics 132
 low-cost airlines 187, 230
 loyalty 199
 luminescence dating 179
 luxury 216
 macroconcept 243
 main-stream themes 114
 Manresa 156
 map 80, 84, 85, 124, 192, 198, 224, 240
 maps of resilience 101
 marginal areas 183
 marginalisation 107, 174, 175, 221
 Marginality 144
 market based solutions 102
 marketing 202
 marketingcommunication 98
 Mars 82
 Marxism-Leninism 126
 Marxist-Leninist geography 136
 matera 185
 mathematics 120
 Mazowieckie 154
 mean wind 169
 med-cortex domain 168, 248
 mediterranean area 171, 237
 Mediterranean diet 146
 medium sized cities 229
 Medveszállás 239
 memorial sites 210
 mental mapping 80, 83, 126, 147
 methodology 117, 167, 243

- methods 190, 194
 metropolitan areas 109, 130, 146, 235
 microsimulation 165
 migration 84, 85, 89, 90, 91, 93, 94, 124, 139, 147, 161, 228, 241
 mining 115
 minority 148
 minority issues 90, 91, 147, 149, 156, 174
 Miocene 239
 mobile experience 192
 mobilities of knowledge 90, 107, 127
 mobility 84, 90, 92, 160, 199, 219, 226
 mobility studies 93
 model input data 142
 model RegCM 168, 169
 modernization 140
 Moldavian Plateau 141
 monitoring network 78, 141, 162, 240
 Montenegro 137
 morphometry 163
 mortality 76, 227
 Moscow 151, 233
 mountains 153
 msc students 244
 multi-scale study 241
 multiactors 102
 multicultural neighbourhood 207
 multidimensionality 225
 multifunctionality 184, 235
 multilevel governance 74, 102, 109
 multilingualism 147
 multivariate data analysis 245
 Mures County 175
 narrativity 117
 national initiatives 95
 nationality 87, 146
 national policies 95
 natural disaster 100, 140, 165, 191
 natural factors 170
 nature-society dichotomy 122, 136
 nature conservation 122, 170, 243, 246
 neighborhood 165
 neoliberal capitalism 186, 213, 215, 219
 networked mobility 89
 network geography 212
 network power 109
 new generation 117
 NIDL 156
 nighttime lights 135
 noise map 210
 normalized difference vegetation index 245
 North-Atlantic Oscillation 245
 Norway spruce 162
 nouveaux paysans cultivés 234
 Novi Sad 79
 nuclear disaster 139
 observatory 124, 235
 old industrial city 156
 online social networks 212
 open data 81
 openness of borders 86, 195
 organizational proximity 229
 osl dating 178, 180
 otter ecosystem 172
 outskirts 206
 Padiş 124
 paleoenvironment 136, 179, 249
 paleohidrography 135
 paleosol 179
 parametrization 168
 participation 181, 223
 particle matter 78
 partnership agreement 73, 130, 131
 path dependence 75
 Pavia 199
 PBL 116
 perception 73, 80, 122, 147, 166, 200
 periglacial landforms 163
 periphealization 109, 173
 peripheral rural areas 107, 228
 periphery 74, 107, 143, 173, 175
 permafrost 162
 petrography 239
 petroleum refinery 239
 photogrammetry 113
 photograph 119
 physical and social geography 246
 pilgrimage centre 202
 piping 134
 place names 148, 156, 157, 195, 196, 197, 198, 232, 240, 244
 planet 82
 planning 131
 planning arrangement of solar panels 76, 192
 planning criteria 79
 planning process 223
 plant traits 241
 plate tectonics 116
 pleistocene 178, 179, 239, 240
 Poland 88, 105, 109, 123, 134, 160, 213
 polarization 173, 186
 Polesie 138
 policy 75, 100, 166
 policy mobilities in education 212
 political-administrative structure 161
 political-territorial control 73, 83, 87, 190, 194, 241
 political economy 214
 political ideology 126, 151
 political parties 150
 pollution 78
 polycentrism 187, 230
 population ageing 227
 population decline 207
 Portofino Park 141
 Portugal 241
 possibilism 137
 post-colonial 157
 post-disaster recovery 130
 post-socialist city 130, 165, 191, 205, 207, 214, 215, 229
 post-socialist transformation 105
 post-social transition 195
 Post-Soviet city 90
 Post-Soviet countries 107, 138, 229, 233, 236
 postcolonialism 80, 87, 117
 postglacial evolution 242
 postpolitics 214
 postsocialism 173
 postsocial transition 107, 153, 229, 246
 poverty 90, 174, 220
 power-strategies 225
 power struggle 225
 Poznań 123
 practising society 116
 Prague 211
 precipitation 170, 247, 248
 price levels 110, 226
 privat colleges 130
 propaganda 197
 prosumers 81
 protected areas 122
 protest 157, 158
 proximity 229
 psychogeography 80
 public education 119, 175
 public perception 99, 158
 public policies 172
 public space 147, 155, 157, 158, 159, 218, 220, 221, 222, 223
 public space development 79
 public universities 130
 quality of life 84, 164, 165, 166, 167, 241
 Quality productions 146
 quantitative assessment 115
 quaternary 249
 r.sun 76
 radiocarbon dating 180
 rafts 242
 rainfall simulator 177
 rainfall trend 168
 Rapallo 171
 rare Earth elements 178
 RCM 169
 recreation 92, 115
 recruitment agency 94
 reforms 185
 regeneration strategies 105
 region 74, 145, 159, 198
 regional advantage 242
 regional climate modelling 169, 248
 regional development 75, 109, 110, 138, 144, 145, 242
 regional higher education institutions 109
 regional inequalities 107, 145, 159
 regionalisation 106
 regional markets 216, 226
 regulated river 171
 regulatory state 220, 226
 relational 225
 religious center 208
 religious tourism 202
 relocation 109, 110
 remote sensing 211
 renewable energies 106, 112
 renewable energy 98, 112
 repeat visitors 199
 residential differentiation 90
 residential environment 164
 residential mobility 205
 residential preferences 206
 residential zone 207
 resilience 99, 100, 101, 153, 185, 209
 restaurant day 222
 retail 216, 226
 retail competitiveness 217
 retirement villages 227
 return migration 95
 reurbanization 206

- reverberation 158
- Riga 90
- right to the city 218
- right to the city 158, 191, 219, 220, 221
- Rio de Janeiro 158, 219
- riparian vegetation dynamics 113, 241
- risk 100, 143
- risk reduction 100
- river avulsion 244
- riverfront 170, 209, 246
- river management 172
- road transport accessibility 132, 199
- rockfall 141
- Roma issues 222
- Roma issues 147, 161, 174, 220
- Romania 75, 77, 132, 142, 173
- Romanian Carpathians 162
- Roman rural 231, 233
- Rotterdam 101
- roughness 141
- runoff 176, 177
- rural-urban land conversions 114
- rural area 244
- rural areas 89, 94, 104, 134, 152, 154, 173, 200, 229
- rural development 108, 133, 152, 153, 181, 182, 183, 204, 209, 241
- rural development plan 96, 106, 135, 154, 171, 182, 184
- rural development policy 154, 181
- rural landscape 183
- rural space 161, 166
- ruralspace 153, 183, 225, 232, 233
- rural tourism 97, 203
- Russia 140, 185, 229
- Russian cities 233
- Saint Martin of Tours Route 199
- Sami 202
- sanctuary 208
- Sassi 185
- satellite measurements 76, 82, 245
- scale and education 212
- scaling 83, 100
- scattered community 148
- scattered farmsteads 107
- schizophonic 158
- school cartography 212, 213
- school closures 213
- science 120
- science history 122, 126
- science literacy 116
- seasonality 76, 96, 98
- seasonal residents 104
- secondary carbonate 179
- second home 104
- security 85, 219
- sediment storage quantification 242
- Segre basin 209
- segregation 174, 207
- self-determination 106
- self-development 215
- self-sufficient buildings 192
- semantics 197
- semi-periphery 214
- semiotics 119
- separatism 194
- Serbia 78, 79, 103, 168, 171, 240, 241
- service location 110
- settlement 140
- settlements 154
- sharing economy 89
- shopping behavior 217
- shopping centre 217, 218
- shrinking 105
- shrinking cities 105
- shrinking region 229
- slope instability 141
- Slovakia 128, 130, 165, 170
- Slovenia 149
- slow tourism 92
- small-area 165
- small towns 98, 105, 229
- smartphone 210
- smart city 129, 188, 189, 190, 192, 193, 194
- smart territories 190, 191, 193, 235
- SMEs 153
- snow avalanches 162
- social capital 145
- social entrepreneurship 108
- social exclusion 175, 220, 223
- social geography 192
- Social indicators 144
- social innovation 90, 108, 161, 181, 193, 225
- social integration 207
- social sphere 111
- social values 104
- social vulnerability 175, 191
- social sustainability 121
- society renewal 105, 193, 236
- soft power 162
- soil erosion 176, 177, 209
- soil moisture monitoring 115, 143
- soil organic carbon 176
- soil slip 141
- solar energy 76, 192
- Somogy 180
- sounds 158
- soundscape 158
- South-Eastern Italy 144
- South-East Europe 83
- southern Italy 145
- Southern Carpathians 163
- Southern Italy 146, 181, 232
- Southern Slovakia 149
- South Transdanubian region 92
- sovereignty 85
- space 128
- spatial agglomeration 207
- spatial analysis 151, 164, 195, 241
- spatial and demographic distribution 91, 173
- spatial cognition 104
- spatial data analysis 175
- spatial firms distribution 207
- spatial imaginaries 85, 191
- spatial inequality 212
- spatial justice 219, 221, 222, 223
- spatial mobility 94
- spatial patterns 168, 175
- spatial planning 73, 86, 103, 122, 129, 130, 181, 235
- spatial structure 184, 188
- spatiality 86
- spatial uniform distribution 207
- specialization 110
- spending capacity 226
- split town 246
- sport 123, 124
- sports infrastructure 123
- SRTM 135
- stable isotope 179
- stadiums 123
- stakeholders 100
- state constructions 125
- state history 125
- state power 83, 87, 126, 148, 159
- state sovereignty 88
- statistical analysis 139, 170
- stem 120
- stochastic frontier approach 188
- strategies 154
- street-naming 196
- street names 159, 197
- subgridding 168
- suburbanization 89, 166, 206
- suburbs 172
- Sunday shopping 217
- sunshine duration 170
- surface development 245
- surface temperature 76, 245
- surveillance 158
- Susak Island 249
- susceptibility analysis 244
- sustainability 95, 121, 140, 160, 171, 185, 209, 236, 237
- sustainability responsibility 237
- sustainable development 106, 112, 131, 201, 233, 236
- sustainable land use 182
- sustainable tourism 92
- sustainable tourism development 132
- Sweden 202
- symbolic ethnicity 148, 149
- synergy 132
- synoptic meteorology 244
- Székelyland 106
- Tbilisi 151
- teaching 119, 120
- teaching geography 118
- technical inefficiency 188
- technology 97, 120, 235, 237, 241
- tectonic influence 171
- teenagers 165
- telemedicine 164
- temperat 168
- temperature 76, 170, 248
- temporal distance 89
- temporality 86
- tephra 179
- terrain analysis 82
- territorial cohesion 73, 74, 75, 129, 131, 195, 235
- territorial consciousness 73, 80, 159, 193, 200, 209, 231, 235
- territorial development 110, 132
- territorial governance 74, 83, 181, 209
- territorial identity 84, 86, 139, 140, 243
- territorial impacts 73, 75, 112, 235
- territorial inequalities 174
- territorial management 102, 154
- territorial observation 129, 153, 234
- territorial planning 73, 131

territorial policy 73, 75, 131
 territorial resource 204
 territorial ressource 204
 territorial revision 75, 127
 territorial statistics 195
 territory 83, 86, 87, 120, 195
 territory maintenance 248
 The Czech Republic 75, 170, 219, 227, 243
 thematic routes 202
 theory 121, 167
 theory and practice 162
 thermal comfort 78, 79
 thermal regime 163
 time and opportunity 88
 Tisza 171, 244
 topographic grain 135
 toponyms 196
 tourism 92, 93, 95, 96, 97, 98, 103, 133, 134, 183, 190, 192, 200, 201, 232, 233
 tourism activity 192, 199
 tourism carrying capacity 204
 tourism function 96, 98, 154
 tourism marketing 92
 tourism space 93, 98, 200, 211
 tourist flow 199, 204
 touristic destination 92
 tourist movement 90, 97, 191, 201, 202, 211
 tourist routes 124
 tracers 178
 trade 216
 transactions 185, 226
 transdisciplinary 243
 transformation 128, 131, 158, 186, 209, 214, 217, 236, 243, 246
 transport 160, 166, 187, 219, 230
 transportation infrastructure 132
 transport disadvantage 94
 transport geography 93
 Transylvania 159, 224, 239
 travel patterns 199
 trend 97, 239
 tuning 158
 Turkey 162
 typology of gminy 154
 télévision 232, 233, 234
 UAV 113
 Ukraine 85, 185
 uncertainty 143, 169
 uneven development 89, 132, 143, 226
 unified geography 138
 unintended consequences 88
 university 229, 242
 upgrading 156
 urban-rural continuum 206
 urban bus networks 218
 urban changes 130, 161, 187, 189, 191, 192, 213, 229, 230
 urban climate 78, 247
 urban climate model 77
 urban design 140
 urban e-space 191
 urban entrepreneurialism 213, 214, 215
 urban geography 158, 164, 216, 217, 219, 221
 urban growth 135
 urban heritage claims 218
 urbanization 98, 122, 146, 171, 187, 190, 191, 193, 197, 240
 urban landscape 216
 urban legitimacy 221
 urban lifestyle 206
 urban planning 110, 111, 130, 170, 187, 189, 190, 191, 193, 197, 209, 217, 222, 236, 246
 urban politics 151
 urban regeneration 81, 111, 146, 205, 209, 216, 221
 urban region 192, 215, 230
 urban renewal 155, 222
 urban sociology 172, 218
 urban space 191, 207, 218, 220, 222
 urban structural changes 159
 urban system 103, 190
 urban tourism 190, 204
 urban vulnerability 130, 248
 Uzbekistan 135
 V4 countries 160
 v4 countries 152
 valley-circulation 113
 valley morphology 245
 VFR 93
 victimhood 157
 Vienna 111, 194, 211
 virtual space 212
 visa-free regime 228
 Visegrad Four 97, 159, 160
 Visegrad Gorge 239
 Visegrad Group 89, 159
 visualization 210, 211
 visual methodology 119
 viticulture 114
 Vojvodina 151
 volunteer tourism 200
 Warsaw 76, 218
 water 237
 waterfront transformation 214
 water regime 171
 water stewardship 237
 weather forecast 244
 webmap 82
 weighting 113
 white collar jobs 110
 wildfire 114
 wine 170
 wister 193
 world order 85, 184
 World Youth Day 208
 young people 174, 218, 220
 youth 94
 ZABAGED 77

Maptionnaire

A Powerful Tool for Mapping Local Insight

Create your own map-based questionnaires
and civic participation platforms easily in
the cloud

Create:

A map-based questionnaire of your own with our brilliant editor

CREATE

ANALYZE

Analyze:

Online in Maptionnaire or using your software of choice

Collect data:

Use cases range from highly structured research to open brainstorming

COLLECT

DISCUSS

Discuss and learn:

Promote discussion by publishing the results in Maptionnaire

Try it out at

www.maptionnaire.com



sales@mapita.fi



+358415396661



maptionnaire



[/Maptionnaire](https://www.facebook.com/Maptionnaire)



[@Maptionnaire](https://twitter.com/Maptionnaire)

Main sponsor:

PAGEO



PALLAS ATHÉNÉ
GÉOPOLITIKAI
ALAPÍTVÁNY



Sponsors:

